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# INTERNATIONAL CONGRESS OF MEDICAL AND HEALTH SCIENCES STUDIES

**Abstracts  
Booklet**





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**Abstracts Booklet**

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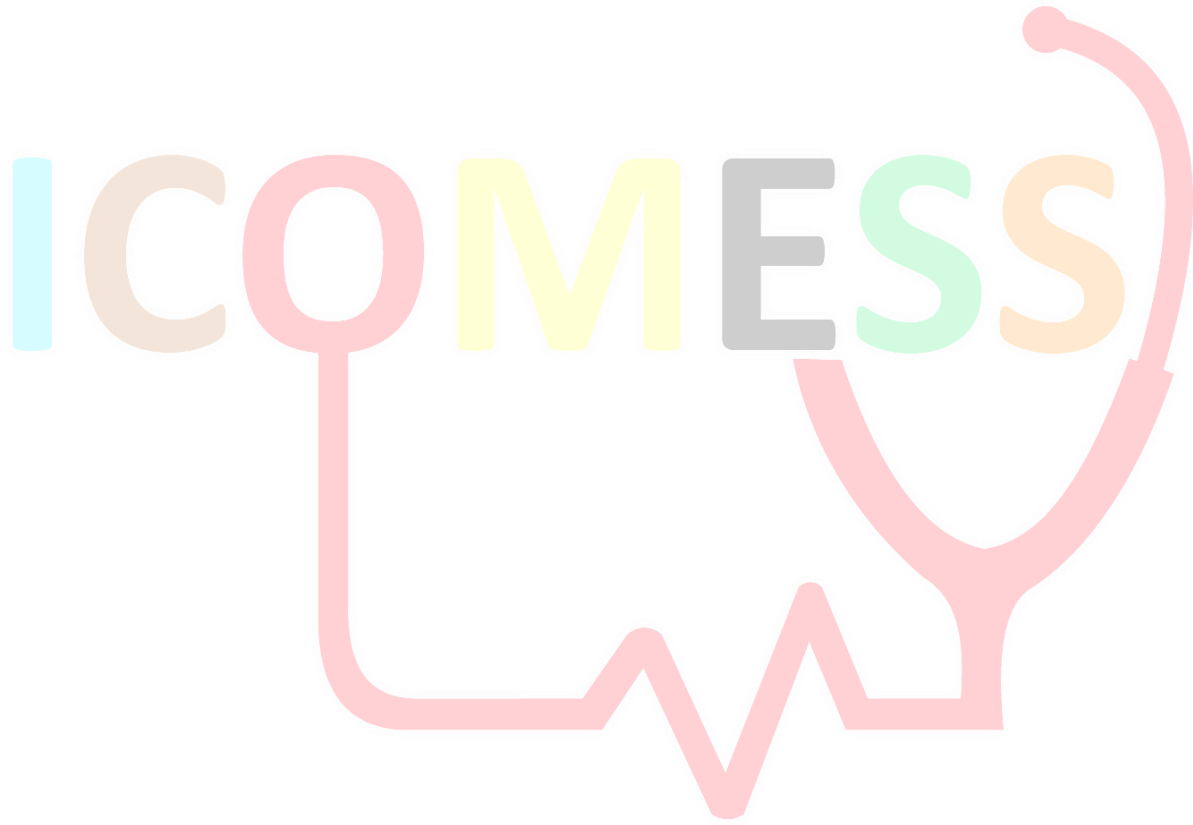
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**Abstracts**



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## Effects of Relaxation Exercises on Osce Score and Anxiety Level

*Gamze SARIKOÇ<sup>1</sup>*

*Italo MASIELLO<sup>2</sup>*

### Abstract

Nursing students have experienced intense anxiety before an OSCE examination, which could lead to lower test scores. The aim of this study was twofold, first to identify the impact of students' anxiety level on their OSCE performance and second to examine the effects of relaxation exercises on students' level of anxiety and OSCE scores. This study was conducted with 61 volunteer nursing students who attend a university college course in Sweden. All participants carried out the OSCE examination which was either urinal catheterization, blood transfusion or care of central venous catheter. If students fail to pass the exam, they had the right to retake the exam at a later time. The control group cohort which did not receive any treatment and the experimental group cohort and received a relaxation exercise before the OSCE examination. All students answered the STAI-S stress questionnaire before the OSCE. The experimental group received a relaxation exercise to lower the anxiety level and then answered the STAI-S questionnaire again before the OSCE. Pre-OSCE state anxiety scores of the control group students were compared with post-relaxation exercises and pre-OSCE state anxiety scores of the cohorts. 60% of the students in the control group are between the ages of 20-30 and 77.1 % are female. On the other hand, 69.2% of the students in the experimental group are between the ages of 20-30 and 92.3% are female. 85.9% of the students in the control group and 95.8 % of the students in the experimental group were successful in the exam. Relaxation exercises were found to be effective in reducing students' test anxiety scores. There was no statistical difference on OSCE performance between the two groups of students. Anxiety-reducing activities should be disseminated and tested in nursing schools.

**Keywords:** anxiety, objective structured clinical examination, students, undergraduate nursing, muscle relaxation.

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## Developing Mask Apparatus for Communication in Operating Rooms: A Utility Model

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Yaren İNCEÇELİKLİ<sup>2</sup>  
Emine YILDIRIM<sup>3</sup>*

### Abstract

Operating room; It is a sterile environment where equipment such as masks, bonnets and box shirts are used. Sometimes, physicians are called during the operation in order to transport the patients from the surgical services to the operating room. In this process, non-sterile personnel are asked for help and difficulties are experienced. The 2021/007769 mask apparatus, which we developed as a utility model, can be placed on a Bluetooth headset, so that it will be easier for the physician to answer the phone during the surgery. Model features: Apparatus; It is made of soft silicone and is lightweight and has a holding feature with clips. Being in the form of clips with its holder feature originating from soft silicone ensures the device to fall and the mask to be fixed. This clip has a sheath system to keep it fixed on the headphone, to support the earphone, and to prevent the ear anatomy from deteriorating downwards. The case is attached to the earphones and ensures that our apparatus remains stable and functions at high performance. In addition, the adjustment part on the created earpiece allows the mask to be compatible with the face. It is thought that communication can become more seamless thanks to the different designs of the developed apparatus.

**Keywords:** surgery, operating room, mask apparatus, communication

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## Care Management of Newborn with Anorectal Malformation

*Derya SULUHAN<sup>1</sup>*

### Abstract

Anorectal malformation (ARM) is identified as a congenital anomalies involving the development of the rectum and anus. The malformation of the anal leads to bowel obstruction in the newborn. Anorectal malformation is rare disease and the etiology of ARM is unknown. The malformation effects on urinary and genital tracts and requires complex surgery. One of Soave's pull-through, Duhamel procedure, transanal colorectal pull-through procedure, Swenson's pull-through procedure is performed by pediatric surgeons as surgical treatment. The continence after ARM surgery is a problem during following up in children. The rate of continence after surgery ranges from high to low. Newborns with ARM needs to stay due to complex surgery in a long time in the Neonatal Intensive Care Unit. During postoperative period, nursing care is vital for prevention of infection, stoma care, maintain feeding, providing mother-baby attachment, maintaining skin integrity, termoregulation, fluid and electrolit balance. After discharging from hospital, anal dilations is usually required and children have many instestinal problems such as constipation or fecal incontinence. Parents should know how/when they performe anal dilations and regular enemas, and stoma care. Thus, pediatric nurses needs to be aware of teaching the care skills in parents before hospital discharge. The aim of this review is to present care of newborn with ARM in line with literature.

**Keywords:** anorectal malformation, nursing care, care management

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## Pregnancy and Nursing Care in Epilepsy

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### Abstract

Epilepsy is one of the most common neurological diseases worldwide. Epilepsy, which is seen in all ages and genders, has additional risk factors and problems for the female gender. Epileptic seizures during pregnancy increase the risk of morbidity and mortality for both mother and fetus. Although epilepsy in women poses a high risk for pregnancy, it is not an obstacle for pregnancy. Therefore, attention should be paid to preconceptional care and planned pregnancies. In this process, it is important to switch to antiepileptic drugs, which are less risky for the fetus, to continue treatment with monotherapy if possible, to start folic acid supplements, and to prepare for pregnancy and postpartum. In addition to these, multidisciplinary cooperation, especially neurologists, obstetricians, and nurses, is required in order to receive routine care related to this process. During pregnancy, education should be given on subjects such as prenatal screening tests, the use of vitamin K, and the use of antiepileptic drugs. In the postnatal period, breastfeeding and breastfeeding counseling, use of antiepileptic drugs, follow-up by a neurologist, the importance of sleep and rest, contraception, newborn care, and support resources, especially family members, play an important role in all these processes. Nurses play a key role in this complex process and holistic care should be given by nurses to the individual and her family. This review was written to address the importance of nursing care in women with epilepsy in pre-pregnancy, pregnancy, delivery, and postnatal periods.

**Keywords:** Epilepsy, Pregnancy, Female Gender, Nursing Care, Holistic Care

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## Nursing Care and Patient Education in Intestinal Stomas

*Nilgün SÖYLEMEZ<sup>1</sup>*

### Abstract

Intestinal stomas can be opened due to many reasons such as colorectal cancers, congenital anomalies, obstructive or inflammatory bowel diseases, traumas requiring surgery. Stomas are used temporarily or permanently depending on the continuation or disappearance of the situation that requires the stoma to be opened. Despite all the developments in stoma care products and surgical techniques, patients are faced with stoma complications. Therefore, individuals with stoma should be closely monitored for complications. Unsuitable stoma site or bag/adaptor system, lack of knowledge and skills in stoma care can be listed among the possible causes of complications. In the first days after stoma surgery, complications such as edema, bleeding, ischemia and mucocutaneous separation in the stoma are considered as early complications, while some complications such as stoma retraction, prolapse, stenosis and parastomal hernia may develop one month after the surgery. Patients; should provide training on the appearance and function of the stoma, physiological and psychosocial problems related to stoma, peristomal skin problems, complications and care, as well as the effects of stoma on individuals' daily life activities and coping methods. Individuals and their relatives should gain stoma care skills such as bag/adaptor change, stoma/peristomal skin care, colostomy irrigation, bag emptying. It should take a long time for discharge training, and the training should be repeated until learning occurs. Education should be prepared specifically for each patient, and while planning, it should be carried out by taking into account the patient's general health status, age, education level, socio-cultural characteristics, learning method, prejudices and misinformation about stoma. While all these processes are going on, nurses' providing a reassuring and confidential environment for patients and their relatives, establishing therapeutic communication will contribute positively to the adaptation to the treatment and the patient's adaptation process.

**Keywords:** Care, patient education, nurse, intestinal stoma

---

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## The Validity and Reliability of the Turkish Version of Toxic Leadership Behaviors of Nurse Managers Scale

Oya ÇELEBİ ÇAKIROĞLU<sup>1</sup>  
Gamze TUNÇER ÜNVER<sup>2</sup>

### Abstract

This study examines the transcultural adaptation and the reliability and validity of the Turkish version of the Toxic Leadership Behaviors of Nurse Managers Scale (ToxBH-NM-TR).

This methodological study was conducted on 559 nurses in Turkey. Data were collected through ToxBH-NM-TR. The content validity of ToxBH-NM-TR was evaluated by using Lawshe's technique and the scale content validity index and item-content validity ratio were calculated. Confirmatory factor analysis was used to evaluate the construct validity of the scale. The internal consistency of the scale was evaluated with the Cronbach alpha coefficient. The temporal stability of the scale was determined by calculating the intraclass correlation coefficient.

Validity testing revealed a scale-content validity index of .88. Cronbach alpha coefficient of ToxBH-NM-TR was .98. Cronbach alpha coefficients were .96 for the intemperate factor, .93 for the narcissistic factor, .93 for the self-promoting factor, and .90 for the humiliating factor. Standardized factor loadings of all items in the four factors of ToxBH-NM-TR were over .52. Intraclass correlation coefficients between the scores obtained from the first and second applications were over .989 for all factors and they were statistically significant. ToxBH-NM-TR is a reliable and valid scale for evaluating behaviors and actions of nurse managers that are thought to be destructive, dysfunctional, and toxic.

**Keywords:** Nursing; Psychometric testing; Nurse manager; Leadership; Toxic leadership

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## Investigation of Impact of Infertility on Women and the Relationship Between Marital Adjustment and Sexual Dysfunction

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*Özge TOPSAKAL<sup>3</sup>*

*Ash GÖKER<sup>4</sup>*

*Yıldız UYAR<sup>5</sup>*

### Abstract

Infertility is a important life crisis causing physical, psychological, marital and sexual problems in women. The aim of this study was to investigate impact of infertility on women and the relationship between marital adjustment and sexual dysfunction. This was a mixed method study consisted of 242 women admitted to a University Hospital. The questionnaires used in the first stage of the research were the descriptive characteristics of women questionnaire, Infertility Distress Scale, Marital Adjustment Scale and Female Sexual Function Index. In the last stage of the study, qualitative interviews were performed with 12 women who had sexual dysfunction and were highly affected by infertility with a semi-structured interview form. In this study, 16.1% of women had sexual dysfunction (FSFI total score  $\leq 26.55$ ). In the FSFI subscales, sexual dysfunction was 55.0% for desire, 22.7% for arousal, 2.9% for lubrication, 7.9% for orgasm, 7.4% for satisfaction, and 21.9% for pain. It was found that FSFI total score was positively correlated with the Marital Adjustment Scale ( $r=0,386$ ,  $p=0,000$ ), and was negatively correlated with the Infertility Distress Scale ( $r=-0,531$ ,  $p=0,000$ ). Furthermore, women stated that their sexual life was negatively affected during the diagnosis and treatment process, they only had sexual intercourse for the sake of having a child, and considering sexuality as “a duty”, and feeling like a robot. We conclude that health care providers should be aware of the factors affecting the sexual life of women at infertility clinics.

**Keywords:** infertility, assisted reproduction, sexual dysfunction, infertility-related distress, marital adjustment

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## The Effect of Video-Assisted Teaching Given to Patients with Type 2 Diabetes on Insulin Self-Management and Practice Skills

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*Serkan TİMUÇİN<sup>2</sup>*

### Abstract

This semi-experimental study was conducted to examine the effect of video use on insulin therapy self-management and self-administration ability of patients in the training given to Type 2 diabetes patients about insulin therapy and its application. This study was carried out between May 2021 and January 2022 at Nazilli State Hospital, Department of Internal Medicine. The sample of the study was formed by 50 patients who self-administered insulin injections and agreed to participate in the study. The Patient Introduction Form, the Insulin Therapy Self-Management Scale and the Insulin Injection Observation Form were used to collect data. Insulin therapy self-management and insulin administration skills of the patients were evaluated before the training. After the verbal training on insulin, the patients were shown a video recording of insulin therapy and administration. Seven days and five weeks after the training, the patients' insulin therapy self-management and insulin administration skills were reassessed. As a result of the research, the mean age of the patients was  $38.74 \pm 10.65$  and 60% were male. The mean score of the Insulin Therapy Self-Management Scale was found to be  $92.90 \pm 11.22$  in the pre-test,  $106.96 \pm 9.24$  in the post test and  $121.22 \pm 6.48$  in the persistence test. The mean score of the insulin skill observation form was found to be  $11.68 \pm 2.68$  in the pre-test,  $15.08 \pm 1.49$  in the post test, and  $16.52 \pm 0.93$  in the persistence test. There was a significant difference between the mean scores of the patients' age, diabetes diagnosis period, presence of complications, HbA1c and blood sugar level, year of insulin use, insulin unit used, preferred region for insulin injection, educational status and Insulin Therapy Self-Management Scale and Insulin Injection Observation Form. As a result, it was found that the video-assisted instruction given to patients with Type 2 diabetes increased their ability to use insulin injections and self-management.

**Keywords:** Insulin application skills; Self-management, Diabetes mellitus, Video-assisted teaching, Insulin therapy

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# International Congress of Medical and Health Sciences Studies

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## Compassion in Nursing Care

*İnsel İŞLEK<sup>1</sup>*

*Hülya FIRAT KILIÇ<sup>2</sup>*

*Seda CEVHEROĞLU<sup>3</sup>*

### Abstract

Regardless of being a sick or healthy individual, every individual needs compassion. In this regard, the biggest job falls to nurses. Showing compassion to individuals in need of care affects the quality of care of nurses. This is also a very important precursor to the protection and maintenance of the caregiver. Compassion is not pity, and needing compassion is not a sign of weakness. In this context, it can be said that compassion is a human emotion that makes people human and keeps them together. It is necessary to motivate nurses and to understand the concept of compassion correctly in order to understand compassion correctly and to apply care by integrating it with compassion. If it is compassion when care is given, the nurse should take individual decisions and give care without being bound by stereotyped rules. This, in turn, strengthens care by increasing the quality of care provided and encouraging the individual to participate in care. No matter how right the care is given, if there is no Compassion, it will negatively affect the patients. Compassion affects the well-being of both nurses and individuals and adds meaning to care. Based on these, it can be said that; One of the most important forces in the healing process of individuals is compassion. Compassion is one of the most powerful healing methods.

**Keywords:** Compassion, compassion care, care, nurse

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## Testicular Cancer and Testicular Examination Awareness: Are Women More Aware?

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Kamil Akçalı<sup>2</sup>  
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### Abstract

The incidence of testicular cancer is increasing all over the world. According to Turkey Cancer Statistics 2017 data, testicular cancer ranks first among the most common cancers in men aged 15-24. However, when diagnosed early, the survival rate of patients rises up to 96%. In the early diagnosis of testicular cancer, monthly testicular self-examination is recommended, especially in the presence of risk factors such as a family history of testicular cancer. However, it is stated that the awareness of testicular cancer in young and adult men is low, and the rate of self-examination is not at the desired level. Otherwise, it is stated that cancer awareness is higher in women than in men. In a study, it is stated that women's awareness of testicular cancer awareness and knowledge levels are higher than men's. In a study conducted on mothers with boys, it is emphasized that the higher the knowledge and awareness level of testicular cancer, the higher the level of knowledge and awareness of their children. Women are more susceptible to diseases due to both their biological structure and the excess of risk factors. High levels of anxiety about diseases lead women to seek information and develop positive health behaviors. As a result, it can be thought that informing women about testicular cancer as much as men in the society may be effective in improving the health behaviors of their partners or boys. It should not be forgotten that testicular cancer is a great risk threatening the health of young men and the continuity of men's testicular cancer awareness training should be ensured. In this context, it is thought that including women as well as men in testicular cancer awareness studies will contribute to the protection of testicular health and early diagnosis of testicular cancer.

**Keywords:** Testicular Cancer, Testicular Examination, Women, Awareness.

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## The Growing Problem of our Age: The Causes of Childhood Obesity and the Role of the Media in the Development of Obesity

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### Abstract

Obesity, one of the most common problems in childhood and adolescence, is defined as an increase in body fat. It is emphasized that the incidence of childhood obesity has increased in almost every country in the last 10 years and the problem poses a global threat.

Obesity is associated with multiple organ systems in children. Obesity causes hypertension, diabetes, sleep problems, balance disorder and orthopedic problems. However, the psychosocial effects and emotional problems of childhood obesity are much more than physical problems. Studies have shown that obese children are exposed to social stigma and discrimination, resulting in negative effects such as low self-esteem, negative body image, and depression.

Many factors cause obesity. The media effect due to the use of the internet and social media has been added to these factors, especially in recent years. Media increases the time spent in front of the screen. Therefore, causing physical inactivity and increasing unhealthy food preferences facilitate the development of obesity. Another factor that increases the risk of obesity is the media characters used in advertisements and product packaging. Popular characters loved by children are used in advertisements and packages of unhealthy products to be marketed, creating a desire to own that product. In this review, it is aimed to determine the etiology of childhood obesity and the effect of media on childhood obesity.

**Keywords:** Child, Cause, Nursing, Media, Obesity

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## Children with Autism Spectrum Disorder and Nursing Approaches

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### Abstract

Autism is a neurodevelopmental disorder characterized by inadequacy in social communication and repetitive monotonous behavior. Autism symptoms vary depending on various factors such as the severity of the autistic condition, level of development, and age. Therefore, the term spectrum is used today because the symptoms seen in autism are at different levels in each child.

The etiology of autism can be classified as genetic factors, environmental factors and familial factors. Children with autism have impaired social interaction and communication, limited interests and repetitive behaviors.

Pediatric nursing approaches are very important in children with autism. Pediatric nurse should recognize autism spectrum disorder. Each child diagnosed with autism is aware of his/her own uniqueness and should determine the best communication method. The pediatric nurse should ensure that the person(s) who provide primary care for the child with autism are consistent during the hospitalization process. It is known that music therapy is good for these children. If possible, music therapies can be included in the care process. It should reduce the changes as much as possible. Children with autism prefer routines. Because routines are a comfort mechanism for these children and these routines are always interrupted by hospitalization. It is difficult to repeat a child's routine in a hospital setting. However, all attempts should be made to organize the child's schedule while hospitalized, and the home schedule should be followed whenever possible. The aim of this review is to give information about children with autism and to emphasize nursing approaches.

**Keywords:** Autism spektrum disorder, etiology, children, pediatric nursing

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## The Relationship Between Personality Traits and Self-Care Agency Levels with Genital Hygiene Behaviors of Women in Reproductive Age

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Şeydanur GÜLCAN CEHRİ<sup>3</sup>

### Abstract

Personality traits and self-care agency affect women's genital hygiene behaviors. This study was carried out to determine the relationship between the personality traits and self-care agency levels with genital hygiene behaviors of women in reproductive age.

This study was conducted on a total of 283 married women aged 18-45 years in a web-based descriptive and relationship-seeking design. Data were collected online between 15 January-30 July 2021 via the "Introductory Information Form" prepared by the researchers, "International Personality Inventory Short Form (IPIVS)", "Exercise of Self-Care Agency Scale (ESCA)" and "Inventory of Genital Hygiene Behaviour (IGHB)".

The mean score of IGHB were  $81.36 \pm 13.46$  (44-108 score) and the mean score of ESCA  $102.37 \pm 22.11$  (45-140 score). Women were more extroverted, agreeable, conscientious, emotionally stable and open to experience. There were a weak negative correlation between the total IGHB with age, time of sexual activity, and scores of the IPIVS sub-dimensions of introversion, emotional stability/instability, hostility, undirected, and closed to experience score; a moderately positive correlation between the total IGHB with the scores of the sub-dimensions of extraversion, openness to experience, and agreeableness were moderately positive; a high positive correlation between the total IGHB with the conscientiousness sub-dimension and self-care agency scores ( $p < 0.05$ ). According to the body mass index, employment status, education level, income level, family structure and history of abnormal vaginal bleeding in the last two months; there was a statistically significant difference between the mean scores of total IGHB ( $p < 0.05$ ).

In our study, women's genital hygiene behaviors and self-care agency are high. The genital hygiene behaviors of women with positive personality traits and high self-care agency were better. In this context, in order to prevent genital infections in women, health education should be continued within the scope of preventive health services in order to improve genital hygiene behaviors.

**Keywords:** genitalia, hygiene, personality traits, self-care, reproductive age.

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## The Effect of Physical Activity Program on Functional Capacity, Ejection Fraction, Biochemical Markers and Mortality Risk Level in Heart Failure: Case Report

Arzu ŞENTÜRK<sup>1</sup>  
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### Abstract

It is known that physical activity programs given in addition to medical treatment in the management of heart failure symptoms are effective in the management of symptoms such as fatigue and dyspnea by increasing the level of functional capacity, improving the quality of life, reducing heart failure hospitalization and the risk of mortality, and provides benefits in the clinical presentation.

A 40-year-old male patient has been diagnosed with hypertension for 6 years and heart failure (New York Heart Association class II) for 4.5 years. Physical examination findings; blood pressure was 124/86 mmHg, heart rate was 81/min, O<sub>2</sub> saturation was 92%, and borg dyspnea level was 2. The patient's complaints; He has complaints of intermittent chest pain, peripheral edema in both legs, shortness of breath, insomnia and fatigue while dealing with her work. A physical activity program lasting at least 30 minutes each session was applied to the patient with a diagnosis of heart failure, three days a week for three months, and walking follow-ups was done with pedometer monitoring. Weekly phone calls and monthly home visits were made in order to inform the patient about the walking program, increase motivation and evaluate compliance with the process.

In the study, it was determined that the physical activity program applied to the patient with heart failure increased the ejection fraction level, decreased the N-terminal pro-B-type natriuretic peptide level and the Meta-Analysis Global Group risk scoring level in Chronic Heart Failure, in addition to these, it provided a regression in the New York Heart Association classification. In addition, it has been determined that it is effective in controlling the symptoms of dyspnea, fatigue, chest pain, insomnia, peripheral edema and blood pressure, increasing the functional capacity level and quality of life of the individual.

**Keywords:** Functional capacity, heart failure, mortality risk level, NT-proBNP, physical activity

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## The Significance of Critical Thinking and Accurate Clinical Decision-Making in Problem Solving for Nursing Profession

Yasemin CEYHAN<sup>1</sup>

### Abstract

Nurses, who confront many difficulties in the clinic, must produce practical, rational, easy, feasible and sustainable solutions, prioritizing the patient. It is extremely important that these solutions are presented within a certain systematic framework and with a holistic care approach. Nursing philosophy is based on norms that adopt this understanding of care.

The patient profile that nurses may encounter is quite wide. Acute and chronic diseases, disasters, problems brought about by the modern age and unknown processes such as the ongoing pandemic recently, make it necessary to shape the practice standards of the profession according to the situations encountered. These actions also demonstrate that the profession has a dynamic characteristic. Generating solutions to different problems is a valuable acquisition that nurses, who frequently encounter such situations, should obtain throughout their professional life.

Critical thinking is one of the most important characteristics that are effective in problem solving. Critical thinking is the ability to produce different alternatives in solving the problem and to choose the most rational one among them. With the development of this ability, especially clinical problems can be resolved in a short time. In order to accomplish this, various approaches can be utilized; clinical decision-making systems, clinical practice guidelines or the adoption of clinical pathways, as well as the development of different thinking strategies contribute to the more systematic progress of the process. Producing the fastest and most practical solution within all this knowledge and implementing it for the benefit of the patient is the basis of ideal nursing care.

Developing the ability to think critically and decision-making skills against the problems encountered in clinics enables nurses to provide quality care. Therefore, there is a need to teach this skill from the undergraduate years and to develop this ability of nurses.

**Keywords:** Critical Thinking, Clinical Decision Support Systems, Problem Solving, Nursing

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## The Importance of Nurse-Leaded Inhaler Education for the Patient in COPD

*Yasemin CEYHAN<sup>1</sup>*

### Abstract

Chronic Obstructive Pulmonary Disease (COPD) is a progressive and obstructive disease that deteriorates respiratory functions. COPD, which is the third leading cause of death among the chronic diseases, occurs with the combination of chronic bronchitis, emphysema and asthma. The processes of inflammation and tissue destruction constitute the physiopathology. Ultimately, the patient experiences increased mucus secretion and difficulty in expiration. This situation causes dyspnea, cough, sputum symptoms in the patient.

Although the changes in the airways are irreversible, stopping the progression of the disease, alleviating symptoms and the sustainability of daily routines are the basic principles of treatment. The mainstay of treatment of COPD is inhaler therapy. The right technique should be used to provide the expected benefit from inhaler medications acting in a shorter time compared to systemic treatment and having a lower risk of side effects. Inhaler medications require skill and coordination. However, there are various drug groups (nebulizers, metered dose inhalers, dry powder inhalers) used for this purpose in the market, in some cases, various combinations are used. However, numerous studies have shown that patients use these medications incorrectly and cannot achieve the expected effect. For this reason, it is extremely important to provide appropriate individual training to patients and to follow them closely.

Nurses who are in the longest and most effective communication with the patient in clinics are expected to teach each patient the inhaler medications prescribed by the appropriate method using their educational roles and to reinforce with applications. In various studies, it was proven that inhaler education by nurses provided various benefits to the patient. In line with this evidence, it is extremely important to carry out patient education in nursing activities, to ensure that patients receive the expected benefit from treatment, to prevent acute attacks, to prevent repeated hospital admissions and hospitalization.

**Keywords:** COPD, Education of Patients, Inhalers, Nebulizers, Metered Dose Inhalers, Dry Powder Inhalers

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## The Effect of Internet Addiction on Psychological Problems in Children and Adolescents

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*Evrin KIZILER<sup>2</sup>*

### Abstract

Addiction is the inability to stop using or control a substance or behavior. Internet addiction, on the other hand, is defined as the inability of individuals to control the use of the Internet, which causes psychological and social difficulties in their private life, school or work life. Internet, which is one of the most important sources of information, is an indispensable element of today. On the one hand, it provides convenience in accessing and sharing information, on the other hand, it facilitates life by providing opportunities for shopping, making new friendships and socializing.

Studies report that internet use is increasing rapidly in all age groups, and internet usage rates are higher in children and adolescents compared to adults. Longer use of the Internet by children and adolescents results in addiction and hinders physical, cognitive, social and emotional development. It is stated that the real-life interaction of children and adolescents who develop their social relations on the Internet decreases and their social ties are damaged. In this context, based on current and comprehensive literature information, it is aimed to give information about the effect of internet addiction on psychological problems in children and adolescents.

**Keywords:** Addiction, internet addiction, child, adolescent, psychological problems.

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## Investigation of the Effect of Nurse Navigation Program on Complications, Compliance and Quality of Life in Patients with Intestinal Stoma

Gülistan YURDAGÜL<sup>1</sup>

Nuran TOSUN<sup>2</sup>

### Abstract

This study was conducted as a randomized controlled intervention study with repetitive measurements in a pretest-posttest order to examine the effect of nurse navigation program on compliance, quality of life and prevention of complications in patients with intestinal stoma. The study was completed with 30 experimental and 28 control group patients with intestinal stoma in six hospitals, two of which are training and research hospitals, located in Gaziantep city center, between January 1 and December 31, 2021. While counseling, remote support, written and visual trainings, informative messages, phone calls, and appointment scheduling were applied to the patients in the experimental group within the scope of the nurse navigation program, the patients in the control group received standard care. The patients were evaluated using the Patient Information Form, Stoma Complications Evaluation Form, Stoma-Related Problems Experienced Form, Ostomy Compliance Scale, and Stoma Quality of Life Scale at the first interview, at the third and sixth months. Data were evaluated using the SPSS 24.0 program, using time, group, time and group interaction generalized estimation equation (GEE) and LSD tests for scale scores. Unstructured correlation structure was used to evaluate the covariance between repeated measurements. In the study, it was observed that the nurse navigation program provided a significant increase in patients' compliance with the stoma and their quality of life, and a decrease in the incidence of stoma-related complications, although there was no significant difference. A statistically significant difference was found between the groups and within the group in each evaluation in the stoma compliance and quality of life of the patients in the experimental group ( $p < 0.05$ ). In line with the results obtained from the research; it is recommended to implement nurse navigation programs in needed units of health institutions, and to apply them in different chronic conditions that affect the adaptation and quality of life of patients.

**Keywords:** Nursing, Navigation, Stoma, Compliance, Quality of Life

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## Pain Management in Children with Sick Cell Anemia

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### Abstract

Sickle cell anemia is an autosomal recessive disorder that constitutes approximately 70% of congenital hemoglobin disorders seen all over the world. Sick cell disease is characterized by production of abnormal/sickle haemoglobin, susceptibility to pneumococcal and other infections, acute complications, and pain. Repeated vaso-occlusive episodes predispose to multiple organ dysfunction and shortened survival.

One of the most important problems faced by children with sickle cell anemia is the occlusion of the vessels due to sickling and the painful crises caused by tissue ischemia. In cases where it's not intervened in a timely and rapid manner, painful crises cause short and long-term negative consequences. The American Pain Association recommends the development of an individual treatment plan appropriate for the child's developmental level by evaluating the severity of pain, the number of painful crises, the frequency of hospitalization, and previous treatments for the child with pain. Since each of the psychosocial and physiological processes plays a role in the etiology and experience of pain, effective pain management requires multidimensional and comprehensive treatment approaches. Management of painful crises in sickle cell anemia includes rapid assessment and treatment of pain, close follow-up of the child, and prevention of complications by improving the course of the disease with individualized care practices.

Pharmacological and non-pharmacological applications to be applied in Sick Cell Anemia, which is characterized by painful crises, form the basis of nursing care in the control of pain. The aim of this review is to examine the effective management of painful crises in children diagnosed with Sick Cell Anemia in the light of the literature and to provide nurses and other healthcare professionals with information on effective pain control in children.

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**Keywords:** Sick Cell Anemia, Pain Management, Child, Nursing, Care.

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## Operating Room Efficiency: Literature Review

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Fatma CEBECİ<sup>3</sup>

### Abstract

The primary goal of surgical care is safe and effective care. Maximizing efficiency in the operating room is also crucial to increasing the value of the surgical care provided. Therefore, it is necessary to reveal the factors that cause inefficiency in operating rooms, which are the basis of surgery and require efficient and effective management.

**Aim:** In this review, the factors that decrease the efficiency in the operating room and the applications to increase it will be emphasized.

The study was created as a result of the literature review using the Turkish keywords "ameliyat, ameliyathane, cerrahi, hemşirelik, verimlilik" and the English keywords "operation, operating room, surgical, nursing, productivity".

Operating rooms, which are important communication points for patients with the health system, are critical financial centers that make up a large share of hospital costs and revenues. Rising costs and declining paybacks require hospitals to continually find ways to increase efficiency and productivity. It is seen that the factors affecting the efficiency in the operating room are grouped as patient, personnel and system factors. Improving efficiency in the operating room should be evaluated within the scope of improved patient and employee safety, patient and staff satisfaction, beyond simple financial savings.

It is important to identify areas that will increase efficiency and reduce unnecessary costs throughout the continuity of care in perioperative management. For value-based care, it is very important to understand the efficiency of operating rooms where the intraoperative process, which covers a significant part of surgical care, is experienced.

**Keywords:** Operation; Operating room; Surgical; Nursing; Productivity

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## The Effectiveness of the Sexual Health Psychoeducation Program for Physically Disabled Adolescents

Raişe AŞIK<sup>1</sup>  
Semra KARACA<sup>2</sup>

### Abstract

This research was planned to evaluate the effectiveness of the online psychoeducation program including sexual health education in physically disabled adolescents.

In this study, a randomized experimental design with pretest-posttest, follow-up measurement, intervention and control groups was used to evaluate the effectiveness of the sexual health online psychoeducation program in adolescents with physical disabilities. The universe of the study consists of adolescent members aged 12-15 in the Turkish Spinal Cord Paralysis Association (N :600). Nearly 90 people with physical disabilities and their families, who were included in the inclusion criteria of the study, were reached through the institution. 62 people were included in the study as a result of the foresights made due to the intensity of their online classes due to the Covid 19 pandemic, and their inability to volunteer for the subject of the research (they are ashamed and do not want to discuss it as a topic to be discussed). Participants were divided into 31 participants as intervention group and 31 participants as control group by randomization method. The intervention group was divided into 3 groups of 10 and a six-week psychoeducation program lasting 60 minutes once a week was applied. At the end of the training, the intervention and control groups were given a post-test and a follow-up test at the end of the 3rd month.

As a result of the statistical findings made within the scope of the sexual health knowledge and attitude inventory, when the posttest and 3rd month follow-ups of the experimental group were examined, a significant difference was found in their attitudes towards sexuality, attitudes towards sexual behaviors and attitudes towards sexually transmitted diseases ( $p<0.05$ ).

This study can be a guide for creating a model for the creation of sexual health programs for adolescents with physical disabilities.

**Keywords:** Adolescent, physically disabled, sexuality, sexual health, psychoeducation

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## A New Concept and An Existing Threat in Nursing: Organizational Blindness

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### Abstract

In order for institutions to ensure their sustainability, they need to adapt to changes quickly and even turn possible risks into opportunities with their predictions. It is necessary to be open to change in order to provide quality care in the health sector, to adapt to changing technology and to solve problems with scientific method. Appropriate strategies should be developed for improving the quality of care in nursing practices, reducing the costs of care, evidence-based nursing practices. In line with the determined strategies, a method should be adopted that does not ignore or punish mistakes to ensure nurses' participation in innovation and change. Thus, fears that will dull creativity and change should be reduced and the continuity of the trust environment in the organization should be ensured. Especially in the health sector, where technology is used intensively and the number of nurses is insufficient, it is important to determine and prevent organizational blindness in order to evaluate opportunities and improve performance criteria. The continuity of changes in health-related areas and the variability of practices suggest the existence of organizational blindness. Organizational blindness in nurses leads to an increase in workforce turnover rate and workload, an increase in costs, intensive working hours, deterioration of team spirit with other employees, burnout of nurses, decrease in their welfare levels, and less communication between employees and themselves. Nurses need to play a role in the formation of organizational culture in order to facilitate behavior change and ensure their motivation. This prevents organizational blindness and ensures the continuity of the organization. It will bring an increase in the quality and efficiency of the service provided. The aim of this study is to examine the concept of organizational blindness, to discuss the possible consequences and effects of organizational blindness for nurses in line with the literature.

**Keywords:** Organizational Blindness, Management in Nursing, Nurse

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# International Congress of Medical and Health Sciences Studies

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## The Relationship between Organ Transplant Nurses' Compassion Levels and Their Attitudes towards Nursing Profession

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*Meral ÖZKAN<sup>3</sup>*

### Abstract

Compassion is the essence of providing quality health care and an important part of health workers' job satisfaction. A high sense of compassion can increase professional satisfaction by strengthening the care given by nurses. In this respect, it is important to investigate nurses' compassion levels and attitudes towards the profession in order to increase the quality of patient care. For this purpose, the study was conducted in the intensive care units and clinics of İnönü University Liver Transplant Institute between July 2020 and September 2020, in accordance with the descriptive research type. Study population consisted of nurses working in these intensive care units and clinics. It was aimed to reach the whole population, not choosing a sample. A total of 66 nurses were reached. Questionnaire Form, Compassion Scale and Attitude towards Nursing Profession Scale were used to collect data. Frequency, mean, standard deviation, minimum and maximum values, correlation and Cronbach's  $\alpha$  were used in the data analysis. It was determined that the total mean score obtained from the Compassion Scale was  $95.91 \pm 11.10$ . The total mean score obtained from the Attitudes towards Nursing Profession Scale was found to be  $158.55 \pm 14.39$ . It was observed that there was a very weak positive correlation between nurses' compassion levels and their attitudes towards the nursing profession, and this situation was not statistically significant ( $r = 0.207$ ,  $p > 0.05$ ). As a result, it was determined that organ transplant nurses had high compassion levels and positive attitudes towards the nursing profession, but there was no significant correlation between their compassion levels and attitudes towards the nursing profession.

**Keywords:** Attitude, Compassion, Nurse, Organ transplant, Transplantation nursing

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## The Relationship between Nursing Students' Level of Information Technologies Utilization and Artificial Intelligence Anxiety

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*Gürkan ÖZDEN<sup>2</sup>*

### Abstract

Depending on developments in the informatics field, the use of innovative applications in the healthcare world is increasing day by day. The use of artificial intelligence, which is an innovative approach, draws attention due to the complexity and increase of data in health services. It is thought that students, who are health professionals in the future, will be able to use various artificial intelligence tools in clinical settings. For this purpose, the study was conducted in İnönü University Nursing Faculty between October 2022 and November 2022, in accordance with the descriptive research type. The study population consisted of 1.194 students, studying at the faculty. The study was concluded with 563 students. Questionnaire Form, Information Technologies Utilization Scale and Artificial Intelligence Anxiety Scale were used in data collection. Frequency, mean, standard deviation, minimum and maximum values, correlation and Cronbach's  $\alpha$  were used in data analysis. It was determined that the total mean score obtained from the Information Technologies Utilization Scale was  $38.30 \pm 8.86$ . The total mean score obtained from the Artificial Intelligence Anxiety Scale was determined to be  $40.02 \pm 14.19$ . It was seen that there was a positive, low-moderate correlation between the level of students' use of information technologies and their artificial intelligence anxiety, and this situation was statistically significant ( $r = 0.322$ ,  $p = 0.000$ ). As a result, it was determined that students' level of benefiting from information technologies was moderate, while the artificial intelligence anxiety was low. The correlation between the level of information technologies utilization and artificial intelligence anxiety was significant.

**Keywords:** Artificial intelligence anxiety, Information technologies, Nursing, Student

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## University Students' Opinions on Organ Transplant and Donation: A Comparison of Four Different Undergraduate Programs

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### Abstract

This research was conducted to determine the opinions of university students studying in four different undergraduate programs about organ transplantation and donation.

The descriptive study was completed with 381 students selected from four undergraduate-level programs studying at a state university in northern Turkey between March and September 2020. A 17-question survey form was used to collect data. Descriptive statistical methods (Percentage, Frequency, chi-square test) were used while evaluating the study data.

Of the 381 students participating in the study, 80.3% were women and 56.2% were 21 years or older. It was determined that 14.4% of the students thought that the individual would regain their health after brain death, and the highest rate was among the theology faculty students with 19.0% ( $p < 0.05$ ). To the question of who could be the donor, 88.7% of the students answered as an individual with brain death ( $p > 0.05$ ). It was determined that 67.7% of the students received information about organ transplantation and donation from the school ( $p < 0.05$ ). It was determined that 51.2% of the students did not have knowledge about the opinions of religious leaders about organ donation and this rate was highest in the faculty of economics (60.3%) ( $p < 0.05$ ). While the rate of supporters of organ donation among all students was 94.5%, the highest rate was in the medical faculty with 100% ( $p < 0.05$ ). It was determined that 73.8% of the students thought about donating their organs ( $p < 0.05$ ), but the rate of students with donor identity was 5.5% ( $p > 0.05$ ). It was determined that 70.1% of the students did not find organ donation appropriate for their religious belief and the highest rate was in the Faculty of Economics with 81.6% ( $p < 0.05$ ).

It was determined that the knowledge levels of the students studying in undergraduate programs differ according to their departments, and there are limitations in the knowledge of the theology and economics faculty students about organ donation. It was determined that the students supported organ transplantation and thought to donate their organs, but very few of them had donor identity.

**Keywords:** Knowledge Level, Donor, Organ Donation

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## The Effect of Nursing Students' Health Literacy Levels on Health Behaviours

*Hemşire Figen ÇALIŞKAN<sup>1</sup>  
Hemşire İrem Nur ÖZDEMİR<sup>2</sup>*

### Abstract

This study aim to determine the relationship between nursing students' health literacy levels and health behaviors.

The research is descriptive, prospective. It was carried out with 188 nursing students who were doing clinical practice in the hospital and volunteered to participate in the study. Data were collected between October and November 2022 using a questionnaire, Turkey Health Literacy-32 Scale (TSOY-32), Healthy Lifestyle Behaviors (SYBD) Scale II. Ethics committee approval, institutional permission from the institution where the application was made, consent from the participants were obtained. NCSS 2020 Statistical Software program was used to analyze the data.

Participating in the study, 79.8% were female, 58.0% were 2nd grade, 38.3% were 3rd grade and 3.7% were 4th-grade students. The mean age is  $20.43 \pm 1.37$ . 75% stated that they don't smoke, 98.9% do not have a chronic disease, 39.4% do physical activity 3 times a week or more. The total mean score for SYBD Scale II sub-dimensions was  $132.70 \pm 20.64$ . The total mean score of TSOY-32 was  $36.72 \pm 8.19$ . The scores of the students who don't do physical activity in the SYBD Scale II "Physical Activity" sub-dimension were found to be significantly lower than those who do physical activity 2-3 times a week and 3 times a week or more ( $p=0,001$ ;  $p=0,001$ ;  $p<0,01$ ). There was weakly positive and statistically significant relationship between the student's scores on the SYBD Scale and their total scores on the TSOY-32.

The study determined that the nursing students exhibited a moderate level of healthy lifestyle behavior and their health literacy was at a sufficient level. It was observed that those who did physical activity more than twice a week displayed more healthy lifestyle behaviors than those who didn't do it at all. It was determined that students with high health literacy levels exhibited more healthy lifestyle behaviors.

**Keywords:** Health literacy, health behaviors, health promotion, nursing, nursing student

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## The Effect of Male Healthcare Professionals' Knowledge Regarding Male Breast Cancer and Selected Factors on Worry Levels

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Gülsüm Nihal ÇÜRÜK<sup>3</sup>*

### Abstract

This study aimed to examine the effects of male healthcare professionals' knowledge about breast cancer and selected factors on their worry levels.

The research is descriptive and cross-sectional, and the sample consisted of 250 healthcare professionals working at Manisa Celal Bayar University Training and Research Hospital. In order to collect data, the Descriptive Characteristics Questionnaire, the Knowledge Level of Male Health Professionals on Breast Cancer, and the Breast Cancer Concern Scale (MKES) were used. Data were collected by face-to-face interview method. In the evaluation of the data, t-test and Man Whitney-U test, Chi-square tests and Pearson Correlation analysis were used in comparison of two independent groups.

The mean male breast cancer knowledge score is  $20.32 \pm 11.67$  out of 37, and the mean breast cancer anxiety score is  $11.39 \pm 4.6$  out of 24. While 58.40% of male healthcare professionals had low breast cancer anxiety, 41.60% were found to have high anxiety. It was found that those with undergraduate and graduate education, physicians and nurses, and those with high knowledge scores had high levels of anxiety. A statistically significant difference was found between breast cancer anxiety levels according to the knowledge score of male healthcare professionals about breast cancer ( $X^2: 17.22$   $p < 0.05$ ). There is a statistically significant, positive and moderate correlation between breast cancer knowledge scores and breast cancer anxiety scores ( $r: 0.31$ ,  $p < 0.05$ ). No statistically significant difference was found between breast cancer anxiety levels according to other sociodemographic and breast cancer-related characteristics ( $p > 0.05$ ).

**Keywords:** Male Breast Cancer, Level of Worry, State of Knowledge, Nursing

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## Investigation of Health-Related Behaviours and Self-Care Characteristics of Puerperants in the Postpartum Period

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*Rabia SOHBETİ<sup>2</sup>*

### Abstract

The purpose of this study was to measure the puerperants' degree of knowledge, health behaviours, and self-care power. The study was done analytically cross-sectionally with 600 puerperants chosen at random. The study's data were gathered using a questionnaire that questioned the women's descriptive and independent characteristics, as well as a self-care scale. 38.5% of the puerperants were between the ages of 19 and 24; 91% were housewives; 49.8% had SGK insurance; 73.2% were from nuclear households; 71.7% had 1-3 pregnancies; and 33.5% had two births. 69.5% of puerperants had no health difficulties, 16.7% had chronic conditions, 77.5% attended to check-ups, and 53.5% had a caesarean section. Among the respondents, 43.8% said they nursed their kids within half an hour, 18.5% said they experienced breastfeeding issues, 46.9% said they would breastfeed as much as they could, and 16% said they employed methods to increase breast milk. After giving birth, 21.8% stated they would attend for a follow-up appointment, 65.3% said they would have sexual intercourse within 40 days, and 31% said they would begin contraception within 40 days. After birth, 6.8% of the puerperants had gastrointestinal difficulties, 21.6% reported trouble bending and straightening, 55.7% said that their social life had been impacted, 23.3% reported dread, anxiety, and concern, 67.7% reported decreased sleep duration, and 89.7% did not exercise. The mean self-care power score of the puerperants was  $98.96 \pm 37.22$ . The puerperants were found to have deficiencies in health behaviours, a lack of information, and a moderate degree of self-care power.

**Keywords;** Postpartum period, Health behavior, Self-care power, Health behaviour, Midwifery

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## The Importance of Family-Centered Care Approach in Pediatric Patients Receiving Palliative Care and the Role of Pediatric Nurses

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*Sibel KÜÇÜK<sup>2</sup>*

### Abstract

In pediatric patients receiving palliative care, family-centered care provides effective treatment, access to the best service, increasing the quality of life of the child, and psychosocial care to pediatric patients receiving more efficient care. This process, which is a challenging experience for pediatric patients as well as for their families where the interaction of patients is the most intense, is a traumatic experience that deeply affects the child, parents and healthy siblings. In order to achieve positive psychosocial outcomes in the child receiving palliative care and his family, a team work is needed in which each of the members has both primary and supportive roles. In this process, family-centered care is needed because the restoration of normalcy can be long and tiring. Family-centered care, which plays a role in ensuring the interaction between family members and health professionals from the diagnosis stage to the palliative care process, has positive effects on the child, other family members and the health care team. In the studies carried out, it is stated that with family-centered care, health workers support and cooperate with the child and the family and increase the quality of life of the child and parents by reducing the problems related to care in this process. Nurses have a great role in this process in increasing communication within the family by using advanced roles, providing social support, developing coping skills and ensuring that healthy siblings are handled.

**Keywords:** Family Centered Care, Palliative Care, Child, Parent, Nursing

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## The Importance of Therapeutic Play in Pediatric Oncology Patients and the Role of the Nurse

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*Evrin KIZILER<sup>2</sup>*

### Abstract

Cancer, which is one of the most important causes of mortality in childhood, is a condition that physically and psychosocially affects the whole family, especially the child. In addition to the stress caused by the diagnosis of cancer and the initiation of the treatment process, the long-term stay of the child in the hospital and the implementation of intensive treatments cause the child's daily routine habits to change, physical and social problems, emotional and behavioral changes, disruptions in school activities, and adversely affect his abilities and skills. Therapeutic play is a method used to reduce anxiety and anger that arise in children, supporting the child patient to overcome psychosocial difficulties, helping children develop healthy growth and making it easier for them to cope with the process of hospitalization. In the studies conducted, it is stated that therapeutic play reduces the physical and psychosocial problems experienced by pediatric oncology patients, contributes to the understanding of negative experiences and treatment procedures, is more involved in disease processes and increases their trust in health professionals. In this process, it is of great importance for pediatric nurses to have information about the importance of therapeutic play, to conduct research, to know the physiological and psychological side effects seen in pediatric oncology patients, and to plan their interventions by using therapeutic play in nursing care.

**Keywords:** Child, cancer, therapeutic play, pediatric nursing, parent

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## Frailty in Kidney Transplant Recipients

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*Cigdem ERDEM<sup>2</sup>*

### Abstract

Frailty is a multifactorial condition caused by a decrease in physical, cognitive, physiological and immune reserves. Studies have shown that frailty is an independent risk factor in terms of increased mortality and morbidity after surgery. This study was conducted to examine the previous studies that determined the prevalence of frailty in kidney transplant patients.

In the study, databases as PubMed, Web of Science and Google Scholar were scanned using various combinations of keywords in both English and Turkish as “kidney transplant”, “frail”, “fragile”, “frailty”, and “prevalence”. All articles published on the subject with an accessible full text and examined the prevalence of frailty in kidney transplant patients were included in the scope of the review.

A total of 24 studies published between 2012 and 2022 were reached. It was found that the majority of the studies were prospective (n=19), while others were retrospective (n=2) and cross-sectional (n=4). In terms of country, majority of the studies were conducted in the United States (n=8), while others were conducted in the Netherlands, Brazil, Japan, China and Spain. It was found that Fried Phenotype (n=18) was usually used in the measurement of frailty. The sample size was found to vary between a minimum of 87 and a maximum of 7078. The prevalence of frailty in kidney transplant recipients was found to vary between a minimum of 1.8% and a maximum of 69.6%.

As a result, it was found that the prevalence of frailty in kidney transplant recipients ranged between 1.8% and 69.6%. It is recommended to determine the frailty status of kidney transplant recipients, and to improve the quality of care by conducting individual nursing care practices in accordance with the needs of frail individuals.

**Keywords:** Kidney transplantation, frailty, fragile, prevalence, nursing.

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## A Rare Ovarian Sex Cord-Stromal Neoplasm: Sclerosing Stromal Tumor

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Şükrü YILDIRIM<sup>2</sup>

### Abstract

Sex cord stromal tumors (SST) are rare subtype of ovarian sex cord stromal tumors, accounting for less than 5% of sex cord stromal tumors. The most common symptoms are pelvic pain, menstrual irregularities and an abdominal mass. SSTs are similar to borderline and malignant ovarian tumors.

A 23-year-old nulliparous patient was admitted to our clinic with complaints of menstrual irregularity, groin pain and bloating. On pelvic magnetic resonance imaging (MRI), a heterogeneous contrast-enhancing mass lesion measuring 57\*56 mm was observed in the widest part of the left adnexal region. The patient's tumor markers were negative. The patient underwent ovarian cystectomy. Frozen section examination result was reported as benign.

Differential diagnosis included SST, fibroma, thecoma, metastatic signet ring carcinoma, steroid cell tumor, fibroma, solitary fibrous tumor and microcystic stromal tumor. It was defined as SST by histomorphological and immunohistochemical findings. It is difficult to distinguish SSTs from ovarian malignancies based on imaging findings. The tumor was positive for desmin, calretinin and negative for pancytokeratin.

It has been reported that SSTs can sometimes synthesize estrogen, steroid, dehydroepiandrosterone (DHEA) and androgen. In patients who usually present with complaints of abdominal pain, menstrual irregularity and the presence of a mass in the abdomen, possible hormone levels should be checked after pathological diagnosis after surgery. It should be noted that there may be additional symptoms due to hormone increases. Enucleation is sufficient in the surgical treatment of SST. Radical surgery should be avoided because of the similarity of the mass to other ovarian malignancies. Preoperative diagnosis of SST is difficult because it resembles other malignant ovarian tumors. For this reason, the possibility of SST should be kept in mind especially in women with ovarian mass in the reproductive period. Therefore, fertility-sparing surgery should be preferred.

**Keywords:** Frozen Sections, Ovarian Cysts, Ovary, Sclerosing Stromal Tumor, Sex Cord-Gonadal Stromal Tumors

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## Postmenopausal Torsioned Dermoid Cyst with Congenital Müllerian Anomaly: A Case Report

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*Cenk SOYSAL<sup>2</sup>*

### Abstract

Dermoid cyst is a neoplastic structure that can be seen in women of reproductive age and rarely causes torsion. Although ovarian torsion is seen in premenopausal women, it can also be seen rarely accompanied by adnexal masses in menopausal women. In embryology fallopian tubes, the uterus and the upper two thirds of vagina are derived from paired Müllerian (paramesonephric) ducts. Congenital uterine anomalies are present in 6.7% of fertile women, 7.3% of infertile women and 16.7% of women with recurrent pregnancy loss, suggesting that these anomalies may play a significant role in reproduction. In this presentation, we aimed to present a 60-year-old postmenopausal woman who applied to the gynecological emergency department due to acute abdomen and an emergency laparotomy case for ovarian torsion accompanied by congenital Müllerian anomaly. We performed Total Abdominal Hysterectomy, Bilateral Salpingoophorectomy and Infracolic Omentectomy for a postmenopausal patient who presented with acute abdomen, considering the possible malignant potential. Although it is rarely seen in postmenopausal women, Müllerian duct anomaly should definitely be considered when diagnosing patients. If there is an adnexal mass in postmenopausal women who underwent laparotomy under emergency conditions, oncological diagnoses should definitely be considered and should be kept in mind when planning the surgery.

**Keywords:** Dermoid cyst, postmenopausal woman, Müllerian anomaly

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## Evaluation of Pap-Smear and Cervical Biopsy Results of Women with High-Risk HPV Positivity

*Kemal ATASAYAN<sup>1</sup>*

### Abstract

Human papillomaviruses (HPVs) are double-stranded deoxyribonucleic acid (DNA) viruses that infect only humans. There are more than 200 types of HPVs and at least 40 of which infect the genital area. Most HPV infections, including those with carcinogenic HPV genotypes, typically resolve within 12 months. During productive cervical HPV infection, low-grade cytological abnormalities may be clinically detectable in screening but are usually transient. Oncogenic, high-risk HPV infection causes the majority of cervical cancer and precancers, whereas other HPV infection causes genital warts. We retrospectively scanned the women with high-risk HPV detected in the cervical swap. There were 59 women with high-risk HPV who underwent cervical biopsy and enrolled in the study. There were 15 different types of HPV detected in the samples and 10 were high-risk oncogenic types. The most common types of high-risk HPV were 16 (23,3%), 31 (11,6%), 18 (10%), 35 (6,6%), 33 (5%) and 58 (5%). High-risk HPV coexisted with low-risk HPV in 58,3% of patients. The most common types of low-risk HPV were 11 (26,6%), 6 (18,3%) and 44 (13,3%). Pap-smear tests were normal in 70% of women with high-risk HPV. There were 9 (15%) ASCUS, 4 (6,6%) LGSIL, 3 (5%) ASC-H and 1 (1,6%) in pathologic Pap-smear results. Cervical biopsies revealed 27 (45%) chronic cervicitis, 22 (36,6%) CIN 1, 5 (8,3%) CIN 2, 4 (6,6%) CIN 3 and 1 (1,6%) squamous cell cancer. The oncogenic type was 16 in squamous cell ca. Even though HPV is a very important pathogen that is associated with cancer and precancerous lesions of the cervix uteri, we have a big opportunity to screen all women with HPV testing or cytology and thereby treat patients in the early stage. Also, vaccination is available for the most common types of HPV.

**Keywords:** HPV, cervical cancer, Pap-smear, CIN, precancerous lesions

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## Post-Surgery Vulvar Complication in Bartholin Gland Abscess

Mehmet Şirin ÖZÇELİK<sup>1</sup>

Fatih Mehmet FINDIK<sup>2</sup>

### Abstract

Bartholin's gland is a pair of glands located posterior to the vaginal wall, lateral to the bulbocavernous muscles. It is an important part of the reproductive system and its function is to lubricate the vagina and vulva with secretions during sexual intercourse. In case of obstruction of the ducts, secretions accumulate and cause cyst formation. If Bartholin's cyst becomes infected, Bartholin's abscess develops. While cysts are usually asymptomatic, abscesses cause pain, dyspareunia, discomfort, and difficulty in walking. Abscess treatment is drainage, marsupialization, complete removal of the gland, Word catheter application, and silver nitrate application into the cavity.

This case was a 33-year-old patient with no additional disease, dyspareunia and pain even when walking. He had previously applied to the hospital for this reason, and drainage was performed and repeated. There was an abscess, approximately 7 cm long and 3 cm wide, originating from the left labium, which was seen as tight on palpation. After the incision made at the labium minus level, the abscess was excised together with the wall. It was observed that a defect area occurred in the left labium majus and necrosis developed in the sutured area in the patient who came to the follow-up period in the postoperative period.

In this case, it was emphasized that the patient might need vulvoplasty in the post-surgical complication and aesthetic concerns of the patient might arise.

**Keywords:** Bartholin Gland Abscess , Vulvar Defect

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## Prevention of Secondary Infertility in Women Aged 18-49 and Affecting Factors

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### Abstract

In this descriptive study, it was aimed to determine the secondary infertility risk factors and the prevalence of secondary infertility in women in the 18-49 age group.

The study has a case and control type design. The control group of the study consisted of 162 women who applied to the obstetrics clinic of a training and research hospital and met the inclusion criteria and did not receive infertility diagnosis and treatment before, and the case group consisted of 418 women who were diagnosed with secondary infertility and met the inclusion criteria.

The data of the study were obtained by using the Infertility Risk Factor Review Form created by the researcher between 01.07.2021 and 01.12.2022, through patient files and by face-to-face interview method. Descriptive statistics (Mann Whitney U Test, Chi-square test and independent t test) and multiple logistic regression analysis were used in the analysis of the data.

The prevalence of secondary infertility among women participating in the study was 72.1%. It was determined that 75.8% of secondary infertile women were diagnosed with female-induced secondary infertility and 12.9% were diagnosed with both female and male secondary infertility. According to the results of the multiple logistic regression analysis between the case group and the control group, it was determined that living in the district, age of spouse, duration of marriage, age of marriage, age of menarche, number of pregnancies, number of children and experiencing dysmenorrhea increased the risk of being secondary infertile ( $p < 0.05$ ).

As a result; It is recommended that women in the risk group be given awareness training and counseling to increase fertility awareness.

**Keywords:** Sociodemographic features; Gyneco-obstetric features; Secondary fertility; Risk factors

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## Comparison of Diagnostic Value of Scoring Systems That Are Used at Benign-Malign Distinguishing of Adnexal Masses

*Erhan AKTÜRK<sup>1</sup>*

*Murat DEDE<sup>2</sup>*

### Abstract

The aim of our work was to test and compare the accuracy of six different scoring systems to evaluate adnexal masses in a prospective study. Four of six (Sassone, Lerner, DePriest, Ferrazzi) were morphological, one (Caruso) was vascular and the last (Jacobs) was Risk of Malignancy Index. Between October 2008 and February 2010, a total of 102 ovarian neoplasms were collected in Obstetrics And Gynecology Department of Gulhane Military Medicine Academy. Of these 76 (%74.5) masses were benign, 20 (%19.6) were malign and 6 (%5.9) were borderline. The sensitivity/spesivity of scoring systems we obtained were %90/90.8, %80/89, %80/65.9, %70/74.4, %75/65.9 and %75/68.3 for respectively Caruso, RMI, DePriest, Lerner, Sassone and Ferrazzi. If the cut-off values were 5, 234, 5, 4, 9 and 9 for respectively Caruso, RMI, DePriest, Lerner, Sassone and Ferrazzi, we found the diagnostic accuracy of these tests were %90, %88, %68, %73, %67 and %68. We found that the Caruso and the RMI had the highist diagnostic accuracy rate (Kappa test  $p=0.001$ ). As a result, we tested that the Caruso and the RMI scores were better than the other four traditional scoring systems at distinguishing malignant from benign lesions. We detected the diagnostic accuracy of Caruso's scoring system as 90%. This value for RMI was 88%. During the evaluation of adnexal masses by ultrasonography, while a prediagnosis is being established, we recomment Caruso or RMI be preferred.

**Keywords:** Adnexal masses, scoring systems, ultrasonography

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## P-Wave and QT Dispersion in Preeclampsia

Nurdan YURT<sup>1</sup>  
Şeyda YAVUZKIR<sup>2</sup>

### Abstract

Preeclampsia is an important cause of maternal and fetal mortality and morbidity worldwide. P-wave dispersion (Pd) and QT interval dispersion (QTd) are direct measures of the nonhomogeneity of atrial depolarization and ventricular repolarization, respectively, in electrocardiography (ECG). Recent studies have reported a significant role of prolonged Pd and QTd in various cardiovascular diseases. Because the effect of acute pressure overload, which occurs in a preeclamptic setting, on the intra- and/or interatrial and ventricular conduction times remains unknown, we aimed to investigate the relation of Pd and QTd with the presence and severity of preeclampsia. Forty consecutive pregnant women with preeclampsia and Forty healthy, age-matched pregnant women were included in this retrospective study. The pregnant women with preeclampsia were divided into two groups according to disease severity as follows: mild and severe preeclampsia. A 12-lead ECG was performed for all the pregnant women before cesarean section operation.

Compared with the healthy pregnant women, Pd and QTd were significantly prolonged in patients with preeclampsia (Pd :  $45.4 \pm 7.3$  ms;  $58.7 \pm 8.6$  ms.  $<0.000$  ; QTd :  $20.5 \pm 2.2$  ms ;  $27.8 \pm 7$  ms  $<0.000$ ) Moreover, in the subgroups of preeclampsia, Pd was significantly increased in the severe group. Pd and QTd were directly related to systolic and diastolic blood pressure, which are well-known validated indicators for the severity of preeclampsia.

Preeclampsia triggers an alteration of atrial depolarization and ventricular repolarization, which are evidenced by the prolongation of ECG parameters such as Pd and QTd. ECG is a noninvasive, easy to use, and easily available diagnostic tool, which can be used in the assessment of atrial and ventricular electrical activity in preeclampsia.

**Keywords:** Preeclampsia, QT Dispersion, P-Wave Dispersion

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## Retrospective Analysis of Urinary Tract Infections in Pregnancy

Nurda YURT<sup>1</sup>

### Abstract

Urinary tract infections (UTI) are the most common health problem in pregnancy after anemia. It is seen in 17-20% of all pregnancies. If not treated properly, it can have adverse effects on pregnancy. These adverse effects can be counted as premature rupture of membranes (PROM), preterm birth, chorioamnionitis, puerperal fever, neonatal infection and low birth weight. In this study, it was aimed to investigate the incidence of urinary tract infections in pregnant women who applied to the Obstetrics and Gynecology outpatient clinic of our hospital and to determine the microorganisms in which growth was detected in the urine culture.

### METHOD:

The incidence of urinary tract infections and the reproducing agent pathogens were investigated in pregnant women who applied to the Obstetrics and Gynecology outpatient clinic of our hospital during the 1.5-year period between January 2021 and September 2022. Complete urinalysis was evaluated in the biochemistry laboratory of our hospital and urine culture analyzes were evaluated in the microbiology laboratory of our hospital. The results were determined retrospectively through the automation system.

### Results:

450 pregnant patients were included in the study. The mean age of the patients included in the study was  $26.0 \pm 4.5$  (min: 20 years, max: 44 years), 76.4% of them were under 35 years old, 23.6% of them were 35 years old and over. It was found that 33% (n=150) of the patients had urinary tract infection during pregnancy. While urinary tract infection was detected in 40.3% of patients under 35 years of age, this rate was 28.4% in patients aged 35 and over ( $p < 0.05$ ). Being pregnant under the age of 35 was found to be 1.2 times more risky than non-pregnant women aged 35 and over in terms of urinary tract infection. The microorganism e-coli, which is the most common pathogen in the urine culture, was grown.

### Conclusion:

Urinary tract infection in pregnancy is one of the most important and most common diseases. There is a close relationship between untreated urinary tract infections and preterm labor and related complications. Urinary tract infection in pregnant women is one of the diseases that should be treated.

**Keywords:** Pregnancy, Urinary Tract Infections

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## Investigation of Laparoscopic Surgery Results in Gynecological Cases Over 65 Years of Age

İzğret ÖZGÜRLÜK<sup>1</sup>

Şebnem ÖZYER<sup>2</sup>

Hüseyin Levent KESKİN<sup>3</sup>

### Abstract

As a minimally invasive surgical method, laparoscopy (L/S) is frequently applied in gynecology clinics, especially with benign indications. In addition to the unique risks of laparoscopic surgeries, the increase in pressure for the head and the increase in the load on the pulmonary-cardiovascular system, which occur when the patient is placed in the Trendelenburg position, also pose an additional risk. This situation can cause an increase in morbidity and mortality in laparoscopic surgeries, especially in elderly patients with comorbidity. Our aim in this study was to investigate the efficacy and safety of laparoscopic surgeries performed for gynecological indications in the elderly population (>65 years old).

In this cross-sectional case-control study, the results of 26 cases over the age of 65 who underwent laparoscopic surgery for benign gynecological reasons in a 6-month period in the gynecology clinic of a tertiary hospital were examined. Again, 60 cases between the ages of 40-64 who underwent laparoscopic surgery for benign gynecological indications and 22 cases over the age of 65 who underwent laparotomy (L/T) were included in the study as control groups.

Demographic characteristics, anesthesia characteristics (ASA, duration of anesthesia) and vital signs values during surgery, preoperative and postoperative laboratory values and surgical characteristics of the study cases were separately compared with the data of the control groups.

After all; Although the complication rates are higher in those who underwent L/S between the ages of 40-64 and those who underwent L/T over the age of 65, it is still considered in benign gynecological indications because complications do not cause serious morbidity and mortality, and there is no significant difference between the groups in terms of other clinical and surgical characteristics. It was concluded that L/S surgery can be accepted as a safe and effective method in women over the age of 18.

**Keywords:** Gynecological benign pathologies, patients over 65 years of age, patients between 40-64 years of age, Laparoscopy, Laparotomy

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## Iron Deficiency Anemia in Pregnancy

Nurdan YURT<sup>1</sup>  
Şeyda YAVUZKIR<sup>2</sup>

### Abstract

Iron deficiency anemia is one of the most common public health problems today. Anemia due to iron deficiency is seen in 3.5 billion people living in developing countries. Iron deficiency anemia, which is vital for all age groups, affects the health of women of childbearing age, limits their working capacity, and causes infant and maternal deaths. When the iron deficiency problem is not prevented and/or taken under control, it imposes a great burden on the country's economy because it affects the health system, hinders cognitive abilities in children, and decreases productivity in adults. This study was carried out to determine the frequency of anemia and the affecting factors in pregnant women who applied to the Obstetrics and Gynecology outpatient clinic of our hospital.

### Materials and Methods:

Two hundred pregnant women who applied to the Obstetrics and Gynecology outpatient clinic of our hospital in the 6-month period between January 2022 and September 2022 were included in the study. Pregnant women with known hematological or chronic disease and multiple pregnancies were excluded from the study. The hemoglobin and hematocrit values compatible with the trimester of the pregnant women who agreed to participate in the study were noted retrospectively in the automation system of our hospital.

### Results:

The mean age of the pregnant women was  $25.36 \pm 6.72$  (min: 18; max: 41). The pregnant women were divided into 3 groups according to their gestational week. 14% (n=26) 1st trimester (1-14 weeks), 44% (n=84) 2nd trimester (15-27 weeks), 46% (n=90) 3rd trimester. It was detected in the third trimester (28-40 weeks). Anemia rates of pregnant women according to 1st, 2nd and 3rd trimesters were found as 3.4%, 7.6% and 12.5%, respectively. When all pregnant women were examined, 11.5% of pregnant women were found to be anemic.

### Conclusion:

Anemia is an important and common problem in pregnancy; Most pregnant women are not aware of this problem. Anemia can make pregnancy more problematic. If there is anemia before pregnancy, this problem should be corrected beforehand and should be followed closely during pregnancy.

**Keywords:** Pregnancy, Anemia, Iron Deficiency

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## Gene Expression Analysis in Placenta, Placental Bed and Cord Tissues

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### Abstract

Preeclampsia is a multifactorial cardiovascular syndrome that can cause various complex diseases and death by adversely affecting maternal and infant health. The only available treatment method for the disease is delivery and delivery of the baby, other than that there is no clinical treatment method that will completely cure the disease. Understanding the genetic background and molecular interactions of the disease may lead to the emergence of existing new treatment methods and biomarkers. In this study, it was aimed to determine the biological pathways and network analyzes related to the genes from the gene expression profile obtained by Next Generation Sequencing from the placental tissue, cord, placental bed and RNA samples isolated from the placenta itself of preeclamptic patients. From the RNA-seq data previously analyzed with the Tuxedo Protocol, genes that were significantly expressed at the 0.05 p\_value level were detected. The genes with protein-protein interaction expressed in the same pathway were determined separately by using the R programming language with the KPM 4.0 algorithm, downregulated and upregulated. These two data were entered into the g:PROFILER database separately and the pathways in which genes were enriched and GO terms were determined. Using CYTOSCAPE 3.8.2, the association of genes was visualized at the node and linkage level, and the genes with the most associations were determined. The expression levels of TXLNGY gene, one of these genes, between placenta, placental bed and cord tissues of preeclampsia and control groups were determined with the help of Real-Time PCR. Acknowledgment: Supported by Yıldız Technical University BAP Project no: FYL-2020-3844

**Keywords:** Preeclampsia, placental tissues, hypertension, gene expression, real-time PCR

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## A Stomachache Experience

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*Sezai KANTAR<sup>2</sup>*

*Yavuz PİRHAN<sup>3</sup>*

### Abstract

Chronic mesenteric ischemia or intestinal angina is a disease that starts with food intake and progresses with abdominal pain and weight loss caused by recurrent ischemic attacks. It is a rare but important cause of abdominal pain. Symptoms occur when at least two or more major splanchnic vessels are affected. In the etiopathogenesis, partial or almost complete obstruction of the intestinal vessels takes place. The most common condition of chronic mesenteric ischemia is atherosclerosis in the splanchnic arteries, especially in advanced age. In addition to atherosclerosis, vasculitides, fibromuscular dysplasia, radiation, aneurysms, arteriovenous fistulas, aortic dissection or coarctation, and congenital anomalies of the splanchnic vessels may also cause chronic mesenteric ischemia. It is difficult to diagnose. However, when the diagnosis is made, it results in healing. Diagnosis can often be made by tomographic angiography and magnetic resonance angiography. Conventional angiography, the gold standard for diagnosis, still remains the most sensitive method. Surgical bypass and endovascular balloon angioplasty can be used for treatment. Surgical revascularization and percutaneous transluminal angioplasty can be performed in two of the 3 splanchnic vessels in the mesenteric angiography in a patient who does not have any other gastrointestinal system disease and usually has symptoms of abdominal angina. If left untreated, it can result in death. For this reason, we wanted to share with you a case who applied to our clinic more than once with abdominal pain.

**Keywords:** Abdominal pain, Chronic mesenteric ischemia, Intestinal angina

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## Bilateral Adult Diaphragmatic Morgagni Hernia with Hernia of the Colon and Stomach

*Suat EVİRGEN<sup>1</sup>*

*Sezai KANTAR<sup>2</sup>*

*Yavuz PIRHAN<sup>3</sup>*

### Abstract

Diaphragmatic hernias are usually congenital and occur in 1 in 5000 births. Although it is usually a disease of the infancy age group, it progresses asymptotically and presents with the clinical picture of acute abdomen in the adult age group, especially in the 5th decade. The omentum herniates most frequently, followed by the colon, and to a lesser extent the small intestine, stomach and other intra-abdominal organs. Diagnosis is usually made radiologically. If diagnosis and treatment are delayed, ischemia, necrosis and abdominal sepsis due to perfusion are inevitable in herniated organs. Treated with laparoscopic or open surgery with a trans-thoracic and/or trans-abdominal approach. In the treatment, after herniated abdominal structures are reduced to the abdomen, the defect in the diaphragm is closed primarily and reinforced with synthetic patches. Our aim in presenting a 57-year-old male patient who applied to the emergency department with complaints of shortness of breath and abdominal pain accompanying vomiting for 3 days, is to recall this rare pathology and present it in the light of literature, especially in patients presenting with acute abdomen accompanied by respiratory complaints.

**Keywords:** Acute abdomen, diaphragmatic hernia, morgagni hernia

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# International Congress of Medical and Health Sciences Studies

ISBN: 978-605-72864-4-4

## A Systematic Literature Review: Electronic Cigarettes

*Alperen AKSAKAL<sup>1</sup>*

### Abstract

### Keywords:



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# International Congress of Medical and Health Sciences Studies

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## Evaluation of Osteoporosis After Total Thyroidectomy in Euthyroid Postmenopausal Women

Abstract

Keywords:

Örgün GÜNEŞ





## Cervical Inlet Patch with Sore Throat

*Sezai KANTAR<sup>1</sup>*

*Suat EVİRGEN<sup>2</sup>*

*Yavuz PİRHAN<sup>3</sup>*

### Abstract

Cervical inlet patch , also known as gastric inlet patch; It consists of a heterotopic gastric mucosa located especially in the postcardiac region and just below the upper esophageal sphincter. The cervical inlet patch, which can cause various symptoms and morphological changes in the throat area due to the acid secreted, is often asymptomatic. Chronic globus sensation is particularly common among the symptoms. Malignant transformation and adenocarcinoma can develop on the inlet patch. In this presentation, we presented a case of cervical inlet patch presenting with sore throat in the light of the literature.

**Keywords:** Globus, Heterotopic gastric mucosa, Inlet patch

## Imaging and Morbidity in Overweight Appendicitis

Halim KALE<sup>1</sup>

### Abstract

Acute appendicitis is disease that usually require urgent surgical intervention. It has many morbidities and complications. In the diagnosis of appendicitis, different imaging methods are used (1).

We aimed to predict morbidity in overweight patients operated for acute appendicitis and to reveal the sensitivity of imaging methods.

Patients who were operated for acute appendicitis between April 2020 and September 2021 were added the study by file searching retrospectively. Two groups created according to the patients' body mass index (BMI) <25 kg/m<sup>2</sup> (group 1) and ≥25 kg/m<sup>2</sup> (group 2). Wound infection, length of hospital stay, demographic data, drain use, operation times, Tomography (CT) and ultrasound (USG) accuracy rates were evaluated retrospectively.

239 patients data has collected, 91 were female and 148 were male. Age of patients was calculated as 35.69±15.33 years. The operative times of 109 patients in group 1 and 130 patients in group 2 were calculated as 47.21±15.98 and 52.85±18.16 minutes, respectively (p: 0.01). Hospitalization time were calculated 2.04±1.34 and 2.64±3.01 days respectively (p=0.04). The number of CT patients who underwent CT in patients with appendicitis was calculated as 206 (Group 1: 90, Group 2: 116). The accuracy rate of Bt was calculated as 78 (86.7%) and 103 (88.8%) respectively (p:0.67). The number of patients who underwent USG was 77 (Group 1: 37, Group 2: 40). USG accuracy rate was 70.3%(26) and 47.5%(19) between the groups, respectively (p:0.04). Wound infection was seen in 4 patients in group 1 and 18 patients in group 2 (p: 0.007). Drains were placed in 22 (20.2%) patients in group 1 and 47 (36.2%) patients in group 2 (p: 0.01).

High overweight may leads many health problems nowadays. However, in the diagnosis of acute appendicitis, it should be considered that ultrasound reduces sensitivity, increases complications and morbidity after appendectomy.

**Keywords:** Appendicitis, Morbidity, Overweight, Ultrasonography, Tomography

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## Efficacy of Abdominal Fenestration in the Treatment of Polycystic Liver Disease: A Case Report

*Erçan KORKUT<sup>1</sup>*

### Abstract

Autosomal dominantly inherited polycystic liver disease (ADPLD) is a rare disease with different clinical presentations, characterized by cystic enlargement of the liver. If there are more than twenty cysts, large and small, in the liver, polycystic disease of the liver is mentioned. The cysts originate from the biliary tract epithelium and resemble simple cysts of the liver. Most of the patients are asymptomatic and do not require any treatment.

In very few patients, symptoms such as abdominal pain in the right upper quadrant, early satiety and postprandial fullness can be seen. Rarely, portal hypertension, due to the compression of the vascular structures in the hepatic hilus region and cyst rupture, infection and bleeding can be seen. It is important to make a differential diagnosis of the disease from other diseases that cause polycystic appearance in the liver.

Medical drug therapy, cyst puncture and sclerotherapy, abdominal fenestration of cysts and liver resection can be performed to relieve patients symptomatically. However, the definitive treatment method for the disease is liver transplantation.

In this study, we aimed to present a case with polycystic liver disease and multiple ( $> 40$ ) cysts in the liver and the abdomen was fenestrated by laparotomy.

A 44-year-old female patient with complaints of abdominal pain and abdominal distension for six months and diagnosed with polycystic liver disease on abdominal imaging was admitted to the hospital.

Laboratory findings of the patient were normal. In the dynamic multidetector computed tomography of the patient, multiple cystic lesions, the largest of which was 6 cm, were detected in both lobes of the liver (Figure 1). All cysts seen by laparotomy were fenestrated to the abdomen (Figure 2).

It was observed that the clinical complaints of the patient, were resolved. In the control abdominal tomography taken at the 5th month, it was observed that the liver volume regressed compared to the preoperative tomography, but new cysts were formed in the liver.

In the treatment of polycystic liver disease, fenestration of cysts to the abdomen provides symptomatic relief in the patient. However, new cysts occur during the follow-up period. Liver transplantation should be considered for definitive treatment in patients with impaired liver function, impaired vascular drainage due to cyst compression, and portal hypertension.

**Keywords:** polycystic liver disease, hepatomegaly, laparotomy, fenestration,

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## Breast Pathologies Determined in Women with Nipple Discharge

Zehra ÜNAL ÖZDEMİR<sup>1</sup>

### Abstract

Nipple discharge is one of the most common breast complaints in women. Nipple discharge can be seen in benign breast lesions as well as in atypical ductal hyperplasia, in situ and invasive carcinomas. Nipple discharge associated with breast cancer is usually unilateral, spontaneous, bloody-serous in nature. Cytological examination of nipple discharge; It is a noninvasive method, which has diagnostic value in the determination of intraductal proliferation, is easy to apply, inexpensive, and cost effective.

In this study, it was aimed to analyze the breast pathologies detected in female patients who were examined with the complaint of nipple discharge. Female patients who were examined with nipple discharge between January 2020 and June 2022 were included in the study. Seventeen patients with nipple discharge were evaluated retrospectively. The mean age of the patients was 43. Mammography and ultrasonography data of the patients were analyzed. Cytological examination results of nipple discharge were evaluated. Atypical ductal epithelial cells were reported in 6 (35.2%) patients, benign cytological findings were reported in 7 (41.2%) patients, and non-diagnostic material was reported in 4 (23.6%) patients. In radiological evaluation; Ductal ectasia was reported in 10 patients (58.8%), intraductal papilloma in 5 patients (29.4%), mastitis in 1 patient (5.8%), and malignant lesion suspicious in 1 patient (5.8%). It was determined that this patient was one of 6 patients with atypical cells in cytology. When core biopsy was performed in this patient, invasive ductal carcinoma was detected histopathologically. In our study consisting of 17 patients, 5 (29.4%) of the patients had intraductal papilloma and 1 (5.8%) of the patients had invasive ductal carcinoma.

The first sign of intraductal lesions may be nipple discharge. In conclusion, nipple discharge is an important clinical sign that can be used effectively in the diagnosis of ductal lesions.

**Keywords:** Nipple Discharge, Intraductal Papilloma, Breast Cancer

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## Mirizzi Syndrome with Cystic Duct Variation with Intrapancreatic Opening: A Case Report

Salih KARA<sup>1</sup>  
Yılmaz ÖZDEMİR<sup>2</sup>

### Abstract

Choledocholithiasis is seen in 10-12% of patients with gallstones. Today, the treatment of choledocholithiasis is primarily performed with endoscopic retrograde cholangiopancreatography (ERCP). If the stone cannot be extracted with ERCP, surgical intervention is required.

A 27-year-old female patient who had undergone cholecystectomy 5-6 months ago was admitted to our hospital with complaints of fever, jaundice and abdominal pain. On physical examination, jaundice and tenderness in the right upper quadrant were detected. In the abdominal ultrasound, dilated intrahepatic and extrahepatic bile ducts were observed, and stones were observed in the common bile duct. It was decided to perform an ERCP. In the ERCP performed, the common bile duct and intrahepatic bile ducts were observed as dilated. Scanning was done with balloon, bile sludge was extracted. A stent was placed based on his clinic. In MRCP, it was determined that the cystic duct was long and opened to the intrapancreatic part, running behind the common bile duct, and there were stones in the cystic duct. It was decided to perform a surgical operation. In operation choledochotomy was performed, an impacted stone was detected where the cystic duct opened into the common bile duct. The stones were extracted by applying pressure with bimanual method from the cystic duct and common bile duct. The choledoch was repaired by placing a T-tube in the choledoch. In the postoperative follow-ups, it was observed that the patient's clinical status improved and cholestasis enzymes regressed. The patient was discharged after T-tube was taken, as there was no extravasation and transition to the duodenum by control cholangiography.

Variations of the cystic duct are seen in various forms, and the opening of the cystic duct to the intrapancreatic part of the common bile duct is a very rare condition.

**Keywords:** Mirizzi syndrome, Choledocholithiasis, Cystic duct variation

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## Comparison of Lowcost Handmade Balloon Dissector and High Cost Commercial Balloon Dissector in Laparoscopic Inguinal Hernia Repair

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Engin KÜÇÜKDİLER<sup>2</sup>

### Abstract

Laparoscopic inguinal hernia repairs(LIHR) have become more popular nowadays. situation has also brought high costs. We aimed compare the results of LIHR performed with low-cost handmade balloon dissector(HBD) and commercial balloon dissectors(CBD).

81 patients who underwent TEP(total extraperitoneal) repair with a HBD and CBD were retrospectively analyzed. Demographic data of the patients, postoperative pain scores, hernia sides, developing complications, and operation times were evaluated.

The number of patients who used CBD(group 1) was calculated as 42(39 males, 3 females) and 39 (37 males, 2 females) operated using a HBD(group 2). The operative times between the groups were calculated as  $49.28 \pm 14.07$  and  $49.12 \pm 14.69$  minutes( $p=0.9$ ). In group 1, 17 right, 13 left, and 12 bilateral inguinal hernias were observed. In group 2, 14 right, 16 left, and 9 people had bilateral inguinal hernias. In group 1, the duration of surgery in right-sided inguinal hernias was  $45.47 \pm 14.14$ ; While it was calculated as  $47.53 \pm 13.37$  min and  $56.58 \pm 12.97$  min in left and bilateral hernias, respectively, the operation time in right-sided inguinal hernias in group 2 was  $39.21 \pm 5.02$ ; It was calculated as  $44.68 \pm 5.68$  min and  $72.44 \pm 10.05$  min in left and bilateral hernias, respectively ( $p=0.19$ ,  $p=0.8$ ,  $p=0.014$ ). 5 patients have seroma, 3 patients have cord edema in group 1; 1 patient have seroma, 2 patients have scrotal ecchymosis in group 2 after surgery.

No significant difference was found between complication and recurrence rates, and operation times in TEP LIHR performed with HBD and CBD. The cost of surgery with HBD can be reduced. However, it has been observed that CBD have a shorter operation time in bilateral hernias. We think that Spacemaker™ Plus Dissector System balloon used in bilateral hernias opens more space than the HBD. Clearer results can be obtained with comparative prospective studies with large cases.

**Keywords:** Laparoscopy, laparoscopic inguinal hernia repair, balloon dissector, inguinal hernia, surgery

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## Lymph Node Involvement as a Prognostic Factor in Colorectal Cancer

Cemal ULUSOY<sup>1</sup>

### Abstract

**Aim:** Aim of this study is to evaluate the effect of lymph node metastasis and ratio of lymph node involvement to total harvested lymph nodes in survival in Colorectal Cancer Patients.

**Material and Methods:** 463 patients underwent curative resection due to the colorectal cancer in Prof. Dr. Cemil Taşcıoğlu Şehir Hastanesi Gastrointestinal and Colorectal Surgery Clinic are retrospectively analyzed. For rectal cancer neoadjuvant conducted and non- conducted patients included. For all locations adjuvant treatment conducted patients are included. Patients are divided right colon cancer, left colon cancer and rectal cancer. Operation types are defined, right hemicolectomy, left hemicolectomy, low anterior resection and abdominoperineal resection. From the pathological reports of surgical specimen harvested lymph nodes and metastatic lymph nodes are calculated for each patient. Area Under Curve is calculated with SPSS for Windows statistically and found 0.5 as Cut-off value. Cut-off value of 0.5 is found. Patients with cut-off value of  $<0.5$  and  $>0.5$  are analyzed with the confidence level of 95%. Kaplan-Meier method is used for survival analyses.

**Results:** 303 patients were male and mean age was 63 and 160 patients were female, mean age was 63,6. 174 patients were right hemicolectomy, 46 were left hemicolectomy, 167 were low anterior resection and 67 were abdominoperineal resection. Mean harvested lymph node number is 24,5 for female and 23,2 for male. Mean metastatic lymph node number is 2,5 for female and 2,3 for male. Mean survival time is 40,5 months for female and 42,4 months for male. LNR with the cut-off value of 0.5 is found as prognostic factor affect survival regardless tumor location and type of surgery.

**Conclusion:** Metastatic lymph nodes ratio presented as prognostic factor that influence survival in colorectal cancer patients.

**Keywords:** Colorectal cancer, lymph node, survival, prognosis

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## Effect of Herbal Toothpastes Containing Moringa Oleifera on Dentin Tubule Occlusion in Erosive Cycle Model

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Nesrin KORKMAZ<sup>3</sup>

### Abstract

The aim of this study was to evaluate the occluding/remineralization performance of herbal toothpastes containing Moringa Oleifera.

Fifty dentin samples were immersed in 6% citric acid solution for 2 minutes to expose the dentin tubules and remove the smear layer. The samples were randomly divided into 5 groups (n=10). Control group (deionized water), (S) Sensodyne Repair and Protect; GSK, Ireland, (M) Herbal toothpaste containing Moringa Oleifera, (MF) Herbal toothpaste containing Moringa Oleifera with fluoride, and (MO) Moringa Oleifera oil. The samples were kept in artificial saliva (pH 7.4) and immersed in 2% citric acid solution (pH=2.5) for 7 days 3 times a day for 2 minutes to mimic the oral environment. The agents were applied with an electric toothbrush (Oral B, Cross Action, Procter&Gamble) 3 times a day for one minute. In order to prevent the erosive effect, after citric acid application the samples were kept in artificial saliva for 30 minutes before the agents were applied.

Dentin samples were evaluated at baseline, after citric acid exposure, and after treatment stages using Microhardness and characterized with Scanning Electron Microscope (SEM). Data were statistically analyzed using ANOVA ( $p<0.05$ ).

After the treatment, the lowest microhardness values were obtained from the Control group ( $39,91 \pm 3,83$ ) following MO ( $49,1 \pm 3,45$ ) whereas the highest microhardness values were recorded in S ( $76,6 \pm 2,88$ ) following MF ( $74,3 \pm 4,3$ ) and M ( $71,9 \pm 3,33$ ). Toothpaste groups showed statistically superior microhardness results than control and MO ( $p<0.05$ ). When the SEM images were analyzed tubule occlusion effect was observed in toothpaste groups however in control and MO occluding effect was limited.

According to the results of our study, herbal toothpastes containing Moringa Oleifera resulted in effective dentin tubule occlusion/remineralization and may be used as an effective treatment to reduce dentin hypersensitivity.

**Keywords:** dentin hypersensitivity, dentin tubule occlusion, dental erosion, herbal toothpaste, Moringa Oleifera.

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## Irritation Fibroma: Case Report

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Dilber ÇELİK<sup>2</sup>

### Abstract

Irritation fibromas, which are benign, reactive, localized lesions in which chronic trauma plays a role, are frequently seen lesions of the oral mucosa. The aim of this case report is to present the treatment approaches in two separate patients with irritation fibroma in their lower lips due to lip biting.

An 8-year-old female patient applied to our clinic due to a mass on the lower lip. An asymptomatic, smooth border and surface, raised lesion from the surrounding tissues was detected on the lower lip of the patient who did not have any systemic disease. In the anamnesis, it was learned that the patient constantly traumatized this region of the lower lip. After the examination and anamnesis, the patient was evaluated with the preliminary diagnosis of irritation fibroma. Since the lesion was well-circumscribed and small, it was decided to remove the entire lesion. After the operation, he was sent to the pathology clinic for histopathological examination and the lesion was confirmed to be an irritation fibroma. No recurrence was found in the follow-ups after the patient was informed to stop the irritation habit.

It was learned that a 12-year-old female patient who applied to our clinic with a mass in the lower lip did not have any symptoms in her anamnesis. The raised, well-defined lesion found on the lower lip of the patient without systemic disease was thought to be an irritation fibroma, and it was learned that the patient traumatized this area. The patient was operated, and the pathological examination of the completely removed lesion revealed that it was an irritation fibroma. No recurrence was found in the follow-ups.

Elimination of predisposing factors and surgical excision, when necessary, are important in the prevention and treatment of irritation fibromas.

**Keywords:** Irritation fibroma, traumatic fibroma, chronic trauma, lip biting, excision

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## Comparative Evaluation of Preclinical Students' Tooth Preparations with Different Methods

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Azize DEMİR<sup>3</sup>

### Abstract

The aim of the present study was to compare tooth preparations of preclinical students with traditional and digital methods at the beginning and the end of the semester.

The second year preclinical students of a dental school (n=42) participated in the study. The tooth preparations made by the students at the beginning and at the end of the semester were evaluated and compared with both the traditional method (conducted by two academicians) and with a special CAD/CAM software (prepCheck). With these two methods, all tooth preparations were evaluated in terms of taper, presence of undercut, and roughness of the preparation margin and axial walls. IBM SPSS Statistics 22 program was used for statistical analysis. Paired sample t-test was used for in-group comparisons of parameters. The compatibility between the parameters was assessed by the intra-class correlation coefficient (ICC). Statistical significance was evaluated at the  $p < 0.05$  level.

There was no statistically significant difference between the traditional and digital methods at two different assessment times ( $p > 0.05$ ). The correlation of both methods in the evaluation of tooth preparations was 60.2% (ICC:0.602; %95 CI:0.259-0.786) at the beginning of the semester and 53.1% (ICC:0.531; %95 CI:0.127-0.748) at the end of the semester. Although there was no statistically significant difference between two assessment times in digital method, mean assessment scores at the beginning of the semester were significantly higher than the end of the semester in conventional method ( $p < 0.05$ ).

Digital assessment methods can be useful in preclinical practice however require more time and enough equipment.

**Keywords:** dental education, digital assessment, preclinical skills, tooth preparation

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## Dental Anterior Crossbite Treatment

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Melek BELEVÇİKLİ<sup>2</sup>*

### Abstract

Anterior crossbite is a type of malocclusion defined by the positioning of the maxillary anterior group teeth more lingually than the mandibular anterior group teeth. It is divided into three groups as dental, functional and skeletal anterior crossbite. Crossbite does not heal on its own because the lower incisors prevent the movement of the upper incisors. For this reason, it should be treated. It is recommended that dental anterior crossbite cases, which are especially common in children, be treated as early as possible. 8-11 years is the ideal age for treatment because root development and tooth eruption continue. If anterior crossbite is not treated early enough, this anomaly of dental origin may turn into a skeletal anomaly and its treatment may become much more difficult and complex. In the mixed dentition period, solutions are possible with short-term and simple treatment mechanics. In the intraoral examination of the 9-year-old patient who applied to our clinic due to crowding in her upper anterior teeth, anterior crossbite was detected in tooth number 11. Our second patient is 8 years old. Her parents stated that they brought their daughter to our clinic to prevent gingival recession due to anterior crossbite, and said that she had the same problem with her older sister. Class 1 molar bite relationship was observed in the clinical examination of the patients. No skeletal malocclusion was found in radiographic and clinical examination. A screwed cross appliance with occlusion elevation is planned for the correction of anterior crossbites. After 6 weeks, both patients were found to have improved anterior crossbite. With the awareness of the parents and the correct diagnosis and treatment of the physicians, the problems that are simple in the beginning are prevented from turning into a complex disorder in the future and affecting the quality of life of the patient. In the mixed dentition period, functional disorders that may occur due to malocclusion formation of the patient can be prevented with early preventive and stopper interventions. More difficult and costly treatments that will be required in the permanent dentition period can be avoided.

**Keywords:** Crossbite, Interceptive Orthodontics, Mixed Dentition, Pediatric Dentistry, Preventive Orthodontics

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## Prevalence of White Spot Lesion in Individuals Needing Orthodontic Treatment

Merve BAYRAKÇEKEN<sup>1</sup>

### Abstract

White spot lesions (BNL) are defined as non-cavitation enamel demineralization. These lesions, which were present before orthodontic treatment, either increase or turn into cavitated caries after treatment. The aim of this study is to evaluate the prevalence of BNL in individuals who need orthodontic treatment and apply for treatment.

In this study, the first examination forms of 1042 individuals who applied to Erzincan Binali Yıldırım University Faculty of Dentistry Department of Orthodontics between May 2021 and October 2022 due to various orthodontic anomalies were retrospectively analyzed. Using the information in the first examination form, the incidence of the lesion in individuals, the incidence of the lesion in which jaw and which teeth, and the incidence in terms of gender were evaluated. Statistical analysis of the obtained data was done with Pearson chi-square test.

A total of 1042 initial examination forms (486 men, 556 women) were evaluated in the study. BNL was detected in at least one tooth in 257 (24.6%) of the individuals. In 117 (45.5%) of the individuals with BNL, a lesion was detected in the right upper first molar tooth. Compared to other teeth, the tooth with the highest prevalence of BNL is the right upper first molar tooth. The prevalence of BNL in the maxilla was found to be higher than in the mandible ( $p < 0.05$ ). The prevalence of BNL in men was significantly higher than in women ( $p < 0.05$ ). White spot lesions are common in individuals with poor oral hygiene. Before starting orthodontic treatment, the patient should be informed about oral hygiene before the treatment, as the existing BNL may increase with the treatment.

**Keywords:** orthodontics, pretreatment, white spot lesion, prevalence, oral hygiene

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## Evaluation of the Relationship between Dental Caries and Body Mass Index in Children

*Kamile Nur TOZAR<sup>1</sup>*

*Uğur AKDAĞ<sup>2</sup>*

### Abstract

Çocuklarda büyüme ve gelişim döneminde yeterli, dengeli beslenme oldukça önemlidir. Obezite ile ağız sağlığı arasındaki ilişki tartışmalı bir konu olmakla beraber yapılan araştırmaların çoğu çocuklarda obezite ile diş çürüğü ve periodontal hastalık arasında pozitif bir ilişki olduğunu savunmaktadır. Bu çalışma, okul öncesi dönemdeki çocuklarda çürük, periodontal ve plak indeksleriyle VKİ arasındaki ilişkinin değerlendirilmesini amaçlamaktadır. Çalışmamızda 3-6 yaşları aralığındaki çocukların ağız içi muayeneleri yapılarak çürük, periodontal ve plak indeksleri hesaplandı. Bu çocuklardan boy kilo ölçümü yapılarak Vücut Kitle İndeksi (VKİ) hesaplandı. Çalışmamızın sonuçlarına göre, şişman çocukların çürük indeks ortalamaları zayıf, normal ve aşırı kilolu çocuklara göre anlamlı olarak daha düşük bulunmuştur. Aşırı zayıf çocukların periodontal indeks ortalamaları normal ve aşırı kilolu bireylere göre anlamlı olarak daha düşük bulunmuştur. Ayrıca çalışmamıza göre çok zayıf çocukların plak indeksleri normal ve aşırı kilolu bireylere göre daha fazla bulunmuştur. Çalışmamız sonucunda çürük oluşumu için birçok etiyolojik faktörün olduğu ve bunların etkileşimleri sonucunda meydana geldiği bilinmektedir. Obezite ve çürük oluşumuna benzer faktörlerin etki edeceği düşünülmektedir. Periodontal hastalığa yatkınlığın ise vücudun savunma sistemindeki bozulmadan kaynaklandığı ve obez bireylerde hastalıklara yatkınlığın fazla olması plak miktarı az olmasına rağmen periodontal tedavi ihtiyacının daha fazla olmasına bağlanmaktadır.

**Anahtar Kelimeler:** Vücut kitle indeksi, çürük indeksi, periodontal indeks, plak indeksi, çocuk hasta

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## Rehabilitation of Upper Central Teeth with Excessive Material Loss with Fiber Post: A Case Report

Zeynep ÖZTÜRK<sup>1</sup>

### Abstract

In this case report, it is aimed to provide the function and aesthetics of a permanent central tooth with extensive periapical lesion with excessive substance loss by using a fiber post system and strip crown.

In the clinical examination of a 12-year-old male patient who applied to our clinic with the complaint of periodic swelling in his tooth 21 and aesthetic discomfort, it was determined that there was an excessive material loss due to caries in the tooth. In the radiological examination of the tooth with crown destruction up to the cervical third level, thinning of the root walls and the presence of a periapical lesion were observed. Root canal treatment was started and drainage was provided to the patient. At the next appointment of the patient, calcium hydroxide was applied as an intracanal medicament, and when the tooth was asymptomatic, the root canal treatment was completed using gutta-percha and canal filling paste. Then, 2/3 of the root canal treatment was drained and 37% phosphoric acid was applied into the canal. After dual-cure adhesive resin cement application, 2 fiber posts were placed in the very wide root canal cavity and polymerized. Then, the tooth was restored with composite using a strip crown. It was observed that the tooth was asymptomatic after the treatment and in the follow-ups. In teeth with excessive substance loss, fiber post systems have found use due to their advantages such as durability and ease of use. In this way, teeth can be regained function and aesthetics.

**Keywords:** Aesthetics, fiber post, composite, strip crown, root-canal treatment

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## Change in Hospital Admissions in Dental Diseases Before and During the COVID-19 Pandemic

*Nadejda BELEVA<sup>1</sup>*

*Sadaf AZAD<sup>2</sup>*

### Abstract

In this retrospective cross-sectional study, it was aimed to evaluate the negative effects of the pandemic process in the field of oral health by revealing the characteristics of applications made to a hospital related to oral health before and during the pandemic.

Patient records who applied to Cyprus Health and Social Sciences University Dental Hospital between October 2019 and March 2021 were included in the study. Gender, age, applied unit, applying frequency and procedure records were evaluated. Patient records were divided into two groups as before pandemic (n=338) and during pandemic (n=1517).

Results of the study showed that gender, age and applied unit distributions were not significantly different between before and during pandemic ( $p>0.05$ ). Dental scaling, tooth extraction, night guard, temporary crown, metal supported porcelain crown on implant, compomer filler and orthodontic diagnosis rates were decreased during pandemic, compared to before pandemic. Panoramic x-ray was the most common process before and during the pandemic. The differences between before and during pandemic was statistically significant ( $p<0.05$ ). The results of the research show that the pandemic process in terms of oral health caused significant differences in the reasons for application. In addition, the fact that the patients in the Covid-19 risk group did not apply to our hospital during the research process shows that the patients in this group may face serious oral health problems in the future.

**Keywords:** Pandemic, Covid-19, dental diseases, hospital admission, dental treatment

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## Effects of Curcumin on Methotrexate-Induced Ovarian Tissue Injury in Rats.

Nesibe KARAOLUK<sup>1</sup>

Mete KEÇECİ<sup>2</sup>

### Abstract

Methotrexate (MTX) is a folic acid antagonist used in the treatment of certain cancers and autoimmune diseases. The use of MTX can lead to inhibition of DNA synthesis and an increase in the level of intracellular reactive oxygen species (ROS). In our study, we aimed to show the effect of curcumin on mtX-related changes in the folliculogenesis process. For this purpose, 32 Wistar albino female rats were divided into 4 groups, one control group and three experimental group. MTX was administered i.p. to the mtX and mtX+curcumin groups at a dose of 0.35 mg/kg/day for 28 days. The Mtx+curcumin group was treated by intragastric gavage at 200 mg/kg/day for 28 days. At the end of the experiment, sections were taken from the ovarian tissue for histopathological analysis and Hematoxylin-Eosin (H-E), Periodic acid-Schiff (PAS) and Masson's triple staining were applied. In addition, PARP-1 and p53 expression levels were determined by immunohistochemical method, and malondialdehyde (MDA), superoxide dismutase (SOD), catalase (CAT) levels in the tissue were determined using ELISA kits. SPSS 24.0 program was used for statistical evaluation. A value of  $p < 0.05$  was considered significant for all evaluations. MTX administration significantly increased the number of atretic follicles compared to the control group ( $p = 0.011$ ). Curcumin treatment significantly decreased the number of atretic follicles compared to the MTX group ( $p = 0.043$ ). Curcumin treatment significantly changed the increased MDA levels ( $p = 0.031$ ) and decreased SOD values ( $p = 0.005$ ) compared to the MTX group. MTX significantly increased the expression of p53 and PARP-1 compared to the control ( $p = 0.017$ ) and curcumin groups ( $p = 0.002$ ), curcumin treatment significantly decreased PARP-1 expression compared to the MTX group ( $p = 0.025$ ). The results of our study showed that MTX has negative effects on folliculogenesis through oxidative stress damage and DNA synthesis inhibition, and these negative effects can be treated with curcumin, a powerful antioxidant.

**Keywords:** Methotrexate, Curcumin, Ovary, Oxidative stress, Apoptosis

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## Histopathological Investigation of Possible Protective Effects of *Lavandula Stoechas* on Testicular Damage Induced by Cadmium Chloride In Rats

Süleyman BAKAR<sup>1</sup>

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Hülya ELBE<sup>4</sup>

Volkan YAŞAR<sup>5</sup>

### Abstract

Cadmium is a substance that is mostly used in industry and pollutes the environment. People accumulate this toxic metal in their bodies in many ways. Cadmium causes oxidative stress and impairs the antioxidant defense system. Studies have shown that exposure to cadmium disrupts the blood-testicular barrier, causes germ cell loss, and causes sterility in mammals. Many of these factors cause oxidative stress. To prevent cadmium toxicity, studies are carried out on the use of natural products. *Lavandula stoechas* is an important member of the Labiatae family. This herb offers many beneficial effects therapeutically due to its antioxidant and anti-inflammatory effects. In this study, the possible protective effects of *Lavandula stoechas* on testicular damage induced by cadmium chloride in rats were investigated histopathologically.

35 male Wistar rats were randomly assigned to five groups as follows: Control group, vehicle group (50 mg/kg/day i.p.), cadmium chloride (CdCl<sub>2</sub>) group (2 mg/kg/day i.p.), *Lavandula stoechas* (LSEO) group (50 mg/kg/day i.p.) and CdCl<sub>2</sub> (2 mg/kg/day i.p.) + LSEO (50 mg/kg/day i.p.) group. The treatment was applied for 20 days daily. The experiment was terminated on the 21st day, testes were examined histopathologically, tubule diameters were measured, and Johnsen testicular score analysis was performed.

Rat weights ( $p<0.01$ ), seminiferous tubule diameters ( $p<0.001$ ) and Johnsen score ( $p<0.001$ ) were significantly decreased in CdCl<sub>2</sub> group when compared to the control group. Rat weights increased in the LSEO + CdCl<sub>2</sub> group when compared to the CdCl<sub>2</sub> group. However the seminiferous tubule diameters ( $p<0.001$ ) and Johnsen score ( $p<0.001$ ) were decreased significantly when compared to the control group.

In our study, it was determined that 50 mg/kg LSEO administration for twenty days prevented weight loss caused by 2 mg/kg CdCl<sub>2</sub> in rats, but did not show any significant protective effect on the testis damage caused by CdCl<sub>2</sub>.

**Keywords:** Testis, Cadmium, *Lavandula Stoechas*, Histopathology, Johnsen Score

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## Effects of High-Fat Diet Consumption During Pregnancy and Lactation on Offspring Heart: Possible Protective Role of N-Acetylcysteine

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*Elifide Gizem BAKIRHAN<sup>2</sup>*

### Abstract

Obesity causes adverse changes in the intrauterine environment during pregnancy, making the offspring more prone to cardiovascular disease. In this study, it was aimed to evaluate the links between maternal obesity exposure and cardiovascular health through the neuropeptide Y1 receptor (NPY1R) in the heart and to investigate the potential cardioprotective effects of N-acetylcysteine (NAC). For this purpose, sixteen, 25-day-old Wistar albino female rats were randomly divided into four groups. The control group was fed a standard diet (10% kcal). The obese group (Ob) was fed a high-fat diet (60% kcal). The N-acetylcysteine group (NAC) was fed a standard diet (10% kcal) and NAC (150 mg/kg) was given via intragastric gavage from the onset of pregnancy until postnatal day 25. The obesity + N-acetylcysteine group (ObNAC) was fed a high-fat diet (60% kcal) and NAC (150 mg/kg) was given from the onset of pregnancy until postnatal day 25. Animals were mated with breeding rats at 12 weeks of age. The same diet was continued during pregnancy and lactation. On the 28<sup>th</sup> day after birth, the experiment was terminated to examine the heart tissues of the female offspring. After histological procedures, by using the Cavalieri volume estimation method ventricular volume was calculated, and immunohistochemical analyzes were performed on the sections. According to the stereological analysis, it was determined that the left ventricular volume increased in the Ob group, compared to the other groups ( $p < 0.01$ ). Moreover, it was detected that anti-NPY1R expression was significantly increased in the Ob group's immunohistochemical analysis ( $p < 0.01$ ). NAC supplementation reversed the changes observed in the Ob group and showed a protective effect ( $p < 0.01$ ). In conclusion, NPY1R and NAC may be potential therapeutic targets in future studies for the prevention and treatment of ventricular hypertrophy caused by maternal obesity exposure.

**Keywords:** Maternal obesity, neuropeptide Y receptor, stereology, antioxidant, rat

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## Investigation of the Protective Effect of Propolis against Liver Change in Rat after Exposure to Mercaptopurine Using Stereological Method

*Ahmad YAHYAZADEH<sup>1</sup>*

### Abstract

6-mercaptopurine (6MK) can cause serious side effects on vital organs in living organisms. In this study, it was aimed to investigate the negative effects of 6MK exposure on male liver tissue and to observe whether the negative effects that may occur can be reduced by using propolis (PR). In our study, 28 Wistar Albino male rats, 5-week-old and weighing 60-80 g, were used, and divided into four groups: Kontrol, 6MK, PR, 6MK+PR. Sections obtained from the liver were analysed using unbiased stereological methods.

Our stereological findings showed that the total number of hepatocytes was significantly decreased in 6MK group compared to kontrol group ( $p < 0.05$ ). There was also a significant increase in the volumes of hepatic arterioles and venules in portal triad, sinusoids, and livers in the 6MK than the kontrol group ( $p < 0.05$ ). In the 6MK+PR group, there was a significant increase in the total number of hepatocytes, as well as a decrease in the volume of hepatic arterioles and venules in portal triads, sinusoids, and livers than the 6MK group ( $p < 0.05$ ).

Our findings showed that 6MK caused damage to the liver tissues, and that PR administration had protective effect on the liver tissue exposed to 6MK.

**Keywords:** Liver, 6-mercaptopurine, propolis, rat

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## Capsaicin Induces Apoptosis via Nf-kB Inhibition in Human Cervical Cancer HeLa Cells

Gülistan Sanem SARIBAŞ<sup>1</sup>

### Abstract

Cervical cancer is one of the most common malignant tumors in gynecology. Capsaicin is an alkaloid that is the main active ingredient responsible for the pungent taste in hot peppers. Capsaicin regulates cell proliferation, growth and death by targeting multiple signaling pathways. The efficacy of anticancer agents includes inhibition of nuclear factor kappa B (NF-kB) and matrix metalloproteinases (MMPs) pathways, which are the main molecular mechanisms in cancer progression and development. Active NF-kB is involved in the overexpression of anti-apoptotic, pro-metastatic and pro-angiogenic genes, including interleukins, vascular endothelial growth factor and MMPs, particularly MMP-9, in cancer cells.

The aim of this study was to evaluate the anti-cancer effects and cytotoxic potential of capsaicin against HeLa human cervical cancer cells.

The cytotoxic concentration of capsaicin in HeLa cells was determined by MTT analysis. NF-kB and MMP-9 protein expression levels in HeLa cells treated with capsaicin at IC<sub>50</sub> dose for 24, 48 and 72 hours were determined by immunocytochemical method. In addition, the apoptotic index of varying durations was determined by the TUNEL method.

According to MTT analysis, IC<sub>50</sub> concentration was determined as 168,76 µM. As a result of immunocytochemical analyzes, it was found that NF-kB and MMP-9 expressions in the capsaicin groups were statistically significantly decreased compared to the control group ( $p < 0.05$ ; for 48h and 72 h). In the TUNEL results, the number of positive cells in the capsaicin groups was statistically increased compared to the control group ( $p < 0.05$ ).

In conclusion, capsaicin induced cytotoxicity, increased cancer cell death, and also inhibited cancer cell metastasis in a time-dependent manner in HeLa cells. Further studies are recommended on the disruption of NF-kB and MMP pathways and the potential effects of capsaicin on cancer therapy.

**Keywords:** apoptozis, capsaicin, HeLa, MMP-9, NF-kB

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## Ranolazine Inhibits the Growth of U87MG Glioma Cells and SVG-P12 Fetal Glial Cells

Gürkan YİĞİTTÜRK<sup>1</sup>

### Abstract

Gliomas are the most common type of tumor of the central nervous system that originates in glial cells. There are three common types of gliomas: astrocytomas, ependymomas, and oligodendrogliomas. Malignant gliomas are highly invasive due to their growth characteristics. Currently, treatment for glioma includes surgery, chemotherapy, radiation therapy, and targeted therapy. Ranolazine was approved by the FDA in 2006 for the treatment of chronic angina. It inhibits sodium and potassium ion channels. It has shown antimetastatic effects in prostate and breast cancer cells. However, studies investigating the relationship between Ranolazine and cancer are quite insufficient. The aim of this study was to determine the effect of various ranolazine doses on the viability of U87MG glioma cells and SVG-p12 fetal glia cells. U87MG and SVG-p12 cells incubated in cell culture medium containing 0  $\mu$ M, 10  $\mu$ M, 50  $\mu$ M, 100  $\mu$ M, 150  $\mu$ M, 300  $\mu$ M ranolazine for 24 h. Cell viability was determined by CCK-8 analysis. Cell viability was significantly decreased in SVG-p12 and U87MG cells treated with 50  $\mu$ M, 100  $\mu$ M, 150  $\mu$ M, and 300  $\mu$ M ranolazine compared to untreated cells ( $p < 0.05$ ,  $p < 0.001$ ). Glioma cells were more sensitive to ranolazine than glia cells only in the 300  $\mu$ M administration group. Ranolazine has an antiproliferative effect in both cell lines at doses of 100-300  $\mu$ M.

**Keywords:** U87MG glioma cell line, SVG-p12 fetal glial cell line, ranolazine, cell viability, CCK-8

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## The Effects of Bisphenol A on the Distribution and Heterogeneity of Mast Cells in Rat Digestive Tract

Halil Cumbur YILMAZ<sup>1</sup>

Mecit YÖRÜK<sup>2</sup>

### Abstract

Bisphenol A (BPA) is a chemical component used in plastic products around the world. This study aims to examine the effects of these chemical compounds to which humans are frequently exposed in everyday life, on the heterogeneity and distribution of mast cells in the gastrointestinal system. For the study, 24 male Wistar albino rats were divided into 4 groups (control, sham, 25 mg/kg, and 50 mg/kg BPA treated). BPA was dissolved in corn oil and administration was done by oral gavage for thirty days. Gastrointestinal tissue samples taken from animals anesthetized with inhalation anesthesia were fixed using BLA (Basic Lead Acetate) and Carnoy fixation. Then, following routine tissue follow-up, they were blocked with paraplast. Sections (6 µm) taken from the blocks were stained using Toluidine blue (TB) and Alcian blue-safranin O 8GX (AB-SO) combined dyes. Counting and statistical analysis of the mast cells in the TB-stained sections were performed. According to the results of the analysis, a higher number of mast cells was observed in the BLA fixation solution, while the increase in the number of mast cells was statistically significant in the groups treated with BPA ( $P<0.05$ ). In the combined AB-SO 8GX staining results, AB (+), S (+), and Mix (+) mastocytes were found in almost all sections of the digestive tract. As a result of this staining process, again, no difference was found in the semi-quantitative evaluations performed including the groups treated with BPA. Although BPA does not affect the heterogeneity of mast cells, it does affect their distribution. Therefore, it is assumed that further studies will need to be carried out.

**Keywords:** Bisphenol A, Gastrointestinal Tract, Heterogeneity, Histology, Mast cell.

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## Endocrine Disrupting Chemical-BPA

*Halil Cumbur YILMAZ<sup>1</sup>*

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### Abstract

Although the rapidly increasing population density in the world leads to the rapid development of human beings in technological and scientific terms, it also causes them to reach a huge food consumption. Chemical products intertwined with foods are widely used in the world. The production of large amounts of biomedical and synthetic chemicals that cause environmental pollution endangers natural life and human health. These chemicals are widely available around the world and are distributed in soil, water, air, and food. Some of these chemicals are classified as Endocrine Disrupting Chemicals (EDC). Bisphenol A (BPA) is also classified as one of the Endocrine disrupting chemicals (EDC) due to its binding property against Estrogen receptors. BPA can be found in every production network where plastic materials such as toys, food containers, plastic bottles, etc. are used due to some of its properties. As with other EDCs, BPA can affect the body in different ways. For example, the placenta may bind to estrogen-related Gamma receptors, which are highly expressed in the fetus and newborns, or it may bind to aryl-hydrocarbon receptors, which are linked to steroid hormone synthesis and metabolism. BPA, along with its toxic effects, leads to the development of many diseases. As a result of BPA exposure, many diseases or pathological disorders such as obesity, type 2 diabetes, heart diseases, neurological disorders, cancers, liver enzyme abnormalities, learning deficiencies can be formed along with allergies and asthma. As a result, it is a fact that endocrine disrupting chemicals such as BPA are harmful to human health and the environment, and therefore the management and disposal of environmental wastes is a very important issue. Avoiding EDCs is essential for health and the environment.

**Keywords:** Bisphenol A, Endocrine disrupting chemicals, Environment, Human health, Receptors.

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## With Plasma Visfatin Levels in Hypertensive Patients, FMD (Flow-Mediated Dilation) the Relationship Between Endothelial Function Determined by Noninvasive Pulse Wave Analysis and Indicators

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### Abstract

The main goal of treatment to reduce blood pressure hypertension and target organ damage by preventing the prevention of complications of the disease with the need, therefore, is the reduction of causes of morbidity and mortality.

Flow-mediated dilatation (fmd) is an endothelial-dependent process; medium-sized muscular arteries occurred as a result of shear stress exposure hiperemi measure. Arterial stiffness in tension and elasticity of the vessel wall indicates. Arterial stiffness is an indication of target organ damage in hypertensive patients.

Visfatin that is stated direct regulator of the system on the biomarker of inflammation and endothelial damage, is on a direct role in the regulation cell proliferation and life, extracellular matrix, vascular reactivity and inflammation, is stated that there is a direct regulator of the cardiovascular system. We, in our study plasma visfatin levels in hypertensive patients with FMD and noninvasive endothelial function determined by pulse wave analysis we intended to show the relationship between the indicators.

Our study included 100 hypertensive patients. Ambulatory blood pressure monitoring in hypertensive patients (ABPM) according to the results of Dipper and non – Dipper and Grade 1 – grade 2 were classified as. Visfatin levels(values) are non dipper HT group were significantly higher than dipper HT group ( $p = 0.032$ ). Visfatin levels were not statistically significant grade 2 hypertension was higher in grade 1 hypertensive. Arterial stiffness assessment in the digital volume pulse (DVP) on the parameters stiffness index (SI) and reflection index (RI) did not show statistically significant differences between the groups.

As a result, between visfatin and FMD negative correlation was detected between the plasma levels of the entire group visfatin and the connection to the flow mediated dilatation (FMD) values the result of the correlation analysis ( $R: -0.286$   $P: 0.004$ ). The result of performed correlation analysis revealed a positive correlation with visfatin and SI ( $R = 0.443$   $P: 0.01$ ). Again visfatin and RI is the result of the correlation analysis carried out was a positive correlation ( $R: 0.268$   $P: 0.007$ ). In light of these data the levels of FMD in hypertensive patients arterial stiffness and endothelial function parameters from visfatin an indicator of end-organ damage in hypertensive patients correlation between SI and RI values and show the endothelial dysfunction has to give the idea that a biochemical all parameters that can be used visfatin. However, further supported with results similar to this and larger studies are needed.

Keywords: Visfatin, Hypertension, FMD, Arterial Stiffness, Pulse Wave Analysis

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## Prevalence of Contrast Nephropathy Developing in Patients Performed Peripheral Angiography at Bahçelievler State Hospital Under N-acetyl Cysteine Support

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**Abstract**

**Keywords:**



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## Echocardiographic Parameters to Estimate Cerebrovascular Events in Patients with Atrial Microfibrillation

*Ciban AYDIN*

### Abstract

Very short episodes of AF-like activity (micro-AF) may herald undetermined silent episodes of atrial fibrillation. We investigated possible predictors of stroke [left atrial sphericity index(LASI), left atrial kinetic energy (LAKE),left atrial volume index (LAVI) atrial electromechanical delay (AEMD) intervals] in patients with micro-AF.

#### Material and Methods:

102 volunteer patients diagnosed with micro-AF on rhythm Holter were included in our study. LASI was calculated as a fraction of the left atrial maximum volume to the left atrial volume of the sphere in a 4-chamber view. Biplane method of disks was used to calculate left atrium volume. LAVI was calculated by dividing LA volume by body surface area of patients.

Atrial electromechanical delay (AEMD) intervals were calculated from the atrial walls by using tissue Doppler imaging (TDI). These two groups were compared in terms of whether echocardiographic parameters could be a predictor to predict cerebrovascular events.

Results: While 25 (24.5%) patients were in stroke group (group 1), and the other 77(75.4%) patients without a history of stroke were in group 2. There was a statistically significant difference between the two groups in terms of left and right atrial lateral wall and LA medial wall electromechanical delay times (LA lateral AEMD,RA lateral AEMD,LA medial AEMD) left atrial volume index(LAVI), left atrial sphericity index(LASI),and left atrial kinetic energy (LAKE),left atrial diameter ( LA lateral AEMD;75.7±4.5vs.68.4±3.5,p<0.001, RA lateral AEMD; 69.5±7.1 vs. 57±3.2, p<0.001, LA medial AEMD; 72±4 vs. 66.2±3.5, p<0.001,LAVI; 38.9±3.3 vs.30.9±3.8,p<0.001,LASI;0.78±0,05 vs.0,67±0.4, p<0.001,LAKE; 3,7±0,9 vs. 7,9±1,9, p<0.001, left atrial diameter;40±5 vs. 38±2 p<0.001).

Conclusions: Changes in LASI, LAVI, LAKE, left atrial diameter and atrial AEMD times may be a predictor of stroke in patients with micro AF.

**Keywords:** Atrial Fibrillation, Left Atrial Sphericity Index, Micro-af, Left Atrial Kinetic Energy

## Effect of Cardiovascular Risk Factors on Mortality in Covid-19 Infection

*Aykut DEMİRKİRAN*

*Mustafa DOĞAN*

*Berna YILMAZ*

### Abstract

In the literature, the results of vaccine efficacy studies conducted with populations with different characteristics in different countries vary and there are limited publications in our country. Our aim with this study is to determine the efficacy of BNT162b2 (Pfizer-BioNTech) and CoronaVac (Sinovac) vaccines in patients with cardiovascular risk factors treated in hospital with the diagnosis of COVID-19.

Patients with SARS COV-2 RT-PCR positive, symptomatic and followed up in our hospital with a definitive diagnosis of COVID-19 between May 2021 and August 2022 were included in the study. The patients were divided into two groups according to the severity of the symptoms: mild-moderate and severe-critical patient group.

1261 patients included in the study. The number of patients with severe-critical symptoms were 485, and the number of patients with mild-moderate symptoms were 776. The most common diagnoses were hypertension with a rate of 37.2% and diabetes mellitus with a rate of 33.2%. The mortality risk in patients with hypertension were 2.245 times higher than in patients without hypertension ( $p<0.001$ ). The mortality risk were 1.701 times higher in patients with diabetes than those without ( $p<0.001$ ). Those with a history of coronary angiography with  $>50\%$  stenosis were 1.537 times more likely to have a mortality risk than those without ( $p=0.047$ ). The mortality risk of patients with a history of ischemic stroke were 3.093 times higher than those without ( $p<0.001$ ). Patients with bodymass index  $>25$  kg/cm<sup>2</sup> had a mortality risk 3.929 times higher than those with  $<25$  kg/cm<sup>2</sup> ( $p=0.015$ ). 55.3% of the patients were vaccinated and 44.7% were unvaccinated. When the vaccinated and unvaccinated patient groups were compared, the fact that unvaccinated increased mortality 1.51 times supports the importance of vaccines ( $p=0.042$ ). It is seen that 46.4% of unvaccinated patients have a severe course of the disease.

The rate of comorbidities in the severe-critical patient group was higher than in the mild-moderate patient group ( $p<0.001$ ). These findings from our study show that being vaccinated is effective in preventing severe disease in COVID-19 infection. In addition, the higher rate of protection from severe infection in patients with two doses of Biontech vaccine supports the effectiveness of Biontech vaccine.

**Keywords:** Covid-19, Cardiovascular Risk Factors, Hypertension, Biontech, Sinovac

## Relationship between Admission SYNTAX Score and Triglyceride-Glucose Index in Non-Diabetic Patients with ST-Segment Elevation Myocardial Infarction Evaluated with Proportional Odds Model

Aylin SUNGUR<sup>1</sup>

### Abstract

Recent studies have reported that triglyceride-glucose index (TyG index) has prognostic value in patients with ST-segment elevation myocardial infarction (STEMI). In this study, we aimed to investigate the effect of TyG index on coronary artery disease severity in non-diabetic patients with STEMI.

A total of 1101 non-diabetic patients admitted with STEMI and underwent primary percutaneous coronary intervention were retrospectively included. SYNTAX score was determined by all coronary lesions with >50% diameter stenosis in a vessel >1.5 mm. TyG index was calculated as  $\ln [\text{fasting triglyceride (mg/dL)} \times \text{fasting glucose (mg/dL)} / 2]$ . Patients were divided into low ( $\leq 22$ ) and high ( $> 22$ ) SYNTAX score groups. Baseline clinical features, laboratory data and in-hospital outcomes of the groups were compared. Independent predictors of high SYNTAX score was determined.

Median age was 57(49-67) years and 82.5% of the patients were male. Patients in the high SYNTAX score group (24% of the patients) were significantly older and had a higher prevalence of hypertension. They were more frequently presented with anterior myocardial infarction and Killip class III-IV. Significantly higher admission creatinine, white blood cell count, troponin and creatine kinase-MB levels were observed whereas hemoglobin level was significantly lower. TyG index was similar among groups. In-hospital ventricular arrhythmias, cardiopulmonary arrest and mortality were more commonly observed in high SYNTAX score group. Age (OR:1.38, 95% CI:1.16-1.63,  $p=0.003$ ) and white blood cell count (OR:1.25, 95% CI:1.12-1.40,  $p=0.001$ ) were found as independent predictors of high admission SYNTAX score. Proportional odds model revealed a significant non-linear inverse relationship between TyG index and SYNTAX score in hypertensive patients.

TyG index, a simple and easily accessible marker of insulin resistance, has a non-linear inverse relationship with admission SYNTAX score in hypertensive non-diabetic patients with STEMI.

**Keywords:** ST-elevation myocardial infarction, triglyceride-glucose index, SYNTAX score

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## Effect of Thyroid Dysfunction on the Severity of Coronary Artery Disease

*Mustafa Azmi SUNGUR<sup>1</sup>*

### Abstract

Thyroid dysfunction (TD) is a common health problem among adults as well as coronary artery disease (CAD), the leading cause of death in many countries. TD is known to be associated with many cardiovascular risk factors but it is contradictory if it acts independently in the formation and progression of atherosclerosis. We aimed to investigate the effect of subclinical TD and euthyroid sick syndrome (ESS) on the severity of CAD in patients with non-ST segment elevation acute coronary syndrome (NSTEMI-ACS).

929 consecutive patients with the diagnosis of NSTEMI-ACS and eligible for coronary angiography (CAG) were grouped as subclinical hyperthyroidism (SCT), euthyroidism, subclinical hypothyroidism (SCH) and ESS according to their thyroid function test results and also as non-critical, single-, two- or three-vessel disease according to the number of involved coronary arteries. TD groups were compared according to their CAG results. Risk factors for multi-vessel disease (MVD,  $\geq 2$  coronary arteries involved) were identified.

Prevalence of TD in the study population was 15.7%. Major abnormality was SCT (8.1%) followed by SCH (3.9%) and ESS (3.8%). SCT and ESS groups were found to have more MVD than SCH ( $p=0.02$  and  $p=0.00$ , respectively); ESS group also had more MVD than euthyroid group ( $p=0.04$ ). Low levels of free triiodothyronine and thyroid-stimulating hormone were found to be more prevalent in MVD. Older age, male sex, diabetes mellitus and low high-density lipoprotein-cholesterol level were identified as independent risk factors for MVD.

ESS, whether the result or the reason, indicates severe CAD. Thyroid function should be assessed in all patients with NSTEMI-ACS.

**Keywords:** Thyroid dysfunction, Euthyroid sick syndrome, Non-ST segment elevation acute coronary syndrome, Coronary artery disease severity

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## Adams-stokes Attacks and Pseudoepileptic Convulsions

*Mehmet GÜLCAN*

### **Abstract**

The Stokes-Adams Syndrome is defined as an abrupt, transient loss of consciousness due to sudden but pronounced decrease in the cardiac output, which is caused by a sudden change in the heart rate or rhythm. This definition does not include vasovagal syncope or epilepsy although patients with Stokes-Adams syncope may have seizures like epileptic convulsions during periods of cerebral ischemia. The causes of Stokes-Adams syndrome are often the causes of complete heart block. Attacks of high degree atrioventricular block, resulting in cerebral ischemic symptoms, account for 10 to 20 percent of all cases, in which artificial pacemakers are considered necessary.

The aim of the present paper is to overview Stokes-Adams Attack with a case report, who has previous cerebrovascular event, seizure attacks and repetitive convulsions, remaining to cardiac rhythm disturbance and syncope in cause of consciousness loss and convulsions.

### **Keywords:**



## Placement of Percutan Nephrostomy Catheter; Single Center Experience

İsmail DİLEK<sup>1</sup>

### Abstract

Percutaneous nephrostomy catheter placement is a reliable technique to temporarily or permanently provide upper urinary tract drainage. In this study, we aimed to present the findings of the cases of percutaneous nephrostomy catheter placement with imaging performed in our clinic.

We retrospectively evaluated 62 cases in which a percutaneous nephrostomy catheter was inserted in our clinic between January 2018 and June 2022, under the guidance of ultrasonography and fluoroscopy. Demographic data of the patients, reasons for admission, primary diagnosis, degree of hydronephrosis, complications during the procedure and during catheter use were recorded.

49 (79%) of the patients were male and 13 (21%) were female, and the mean age was  $59.12 \pm 14.43$  years. Percutaneous nephrostomy catheter was placed in 53 patients (83.9%) unilaterally and in 9 patients (14.5%). The procedure was unsuccessful in 1 patient because of the retronally located colon. The technical success of the transaction was 98.4%. Nephrostomy catheter was placed in 35 (56.4%) patients due to obstruction due to oncology, and in 15 (24.1%) patients due to urinary stones. No procedure-related mortality was reported. After the procedure, hematuria without the need for transfusion developed in 2 patients (3.2%), fever in 1 patient (1.6%), and catheter occlusion in 1 patient (1.6%) and they were recatheterized. During follow-up, re-catheterization was performed in 3 patients (4.8%) due to dislocation of the catheter.

Percutaneous nephrostomy catheter placement with ultrasonography and fluoroscopy is an effective and safe method that causes minimal complications and morbidity, has a high success rate, and provides rapid clinical improvement.

**Keywords:** Nephrostomy, Hydronephrosis, Complication, Ultrasonography, Fluoroscopy

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## Imaging-Guided Subcutaneous Port Implantation; Our Clinical Experience and Data

*İsmail DİLEK<sup>1</sup>*

### Abstract

Subcutaneous venous port catheters are central venous catheters that allow long-term and intermittent treatment, have the lowest risk of catheter-related systemic infection, and are more suitable for patient comfort and cosmetics. In this study, we aimed to present the findings of cases of subcutaneous venous port catheter placement, accompanied by imaging performed in our clinic.

Thirty-seven cases of subcutaneous port placed under ultrasonography and fluoroscopy between January 2019 and September 2022 in our clinic were evaluated retrospectively. Demographic characteristics of the cases, primary diagnosis, indications for port placement, procedure technique, duration of the procedure, port type, intervention localization, duration of use after implantation of the port, complications that developed during and during the procedure, the number of removed ports and the reasons for removal were investigated.

Of 37 patients, 14 were female and 23 were male; mean age:  $54.49 \pm 10.24$ . The primary diagnosis of all patients was malignancy, and a port catheter was placed in all patients for chemotherapy treatment. 33 of the port catheters were placed from the right internal jugular vein and 4 of them from the left internal jugular vein percutaneously under local anesthesia with the Seldinger technique, with the catheter tip placed at the atriocaval junction and in the right atrium. In the records examined, it was determined that the patients received chemotherapy from the inserted catheter 3 days later at the latest. The duration of use of the ports varied between 14-267 (Mean:  $109.77 \pm 72.5$ ) days. No early complications such as pneumothorax, hemothorax or hematoma developed in any of the patients. In the postoperative follow-ups, catheter infection developed in 1 patient, catheter thrombosis in 2 patients, and catheter malposition in 1 obese patient.

Subcutaneous venous port catheter placement is an effective, safe and comfortable venous access method in cancer patients. It provides minimal complications and a long-term venous access route when placed with the appropriate technique, accompanied by ultrasonography and fluoroscopy.

**Keywords:** Venous Port, Cancer, Chemotherapy, Complication, Ultrasonography, Fluoroscopy

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## Our Experience of Percutaneous Drainage in Patients with Psoas Abscess

İsmail DİLEK<sup>1</sup>

### Abstract

Psoas abscess (PA) is a rare infectious disease with high mortality and morbidity and difficult to diagnose because of its localization and clinical findings similar to primary hip diseases. In our study, we aimed to present the findings of patients who were diagnosed with psoas abscess and underwent imaging-guided percutaneous drainage.

Eleven cases diagnosed with primary or secondary psoas abscess in our clinic between 2018 and 2022, and percutaneous drainage catheters were placed under ultrasound (USG) or computed tomography (CT) guidance, were evaluated retrospectively. Demographic data of the patients, reasons for admission, comorbidities, imaging methods used during treatment, length of hospital stay and treatment results were recorded.

Eight (72.7%) of the patients were male and 3 (27.3%) were female, with a mean age of 57.6 (41-75 years). The most common reasons for admission were flank pain (n=7, 63.6%) and fever (n=5, 45.4%). 3 patients (27.3%) were evaluated as primary PA and 8 patients (72.7%) as secondary PA. PA was secondary to urinary system stone disease in 3 patients (27.3%), open surgery history in 2 patients (18.1%), paraplegia in 2 patients (18.1%), and Pott disease in 1 patient (9.1%). Percutaneous drainage catheter was placed in 10 patients (90.9%) under USG guidance, and in 1 patient (9.1%) whose borders could not be clearly seen in sonographic imaging, under CT-guided Seldinger Method. The mean drainage time was 13 days (5-19 days). The treatment efficiency of the percutaneous drainage procedure was 90.9% (n=10). One patient (9.1%) with a multicollinear and multiseptal abscess who did not have adequate drainage from the catheter was referred to surgery.

PA is a disease that is difficult to diagnose and therefore carries a high risk of mortality and morbidity. Percutaneous drainage procedures accompanied by imaging methods for PA are a treatment method that requires longer hospital stays, but is less invasive and has high treatment efficiency.

**Keywords:** Psoas abscess, Percutaneous, Drainage, Catheterization, Ultrasonography, Computer Tomography

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## Can Thermal Imaging Be an Alternative to Evaluate Muscle Activity in Sarcopenic Patients?

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### Abstract

Sarcopenia is a muscle disease that is more common in older adults and results from adverse muscle changes that occur throughout life due to old age. Although it can be seen at an early age secondary to reasons such as chronic diseases, sedentary life, malnutrition, etc., it is primarily seen at the age of 65 and over. In this study, it was aimed to develop a program to support the diagnosis with the Thermal Camera Imaging (TCI) method as an alternative to the traditional methods used in the evaluation of muscle activity in sarcopenic individuals. Participants consisted of 20 sarcopenic patients and 20 healthy volunteers who applied to Ondokuz Mayıs University Medical Faculty Hospital. Among the inpatients who met the criteria, those who were determined to have sarcopenia were accepted as the "patient group", and the healthy individuals without any disease in the exclusion criteria were considered the "control group". A questionnaire and data collection form including some sociodemographic characteristics and daily food consumption frequency were applied to all participants. Hand grip strength (HGS) and anthropometric measurements, which are traditional methods used in the diagnosis of sarcopenic patients, were applied to both groups and statistical significance was determined. Thermal images of all participants were obtained from the upper extremity muscles at rest and after heat application, and statistical significance levels were determined between the control and patient groups. The HGS and the anthropometric measurement results of patients and healthy participants were found to be statistically different ( $p<0.001$ ;  $p<0.05$ ). The evaluations of the data obtained from the analysis of the TCI measurements were found to be statistically significant ( $p<0.05$ ). Statistical differences obtained in both methods showed support for the diagnosis of sarcopenia. As a result, it can be suggested that the TCI method can be used in the medical field as an alternative to traditional methods, with the advantages of being a non-invasive, ionizing radiation-free, non-surface contact method.

**Keywords:** Sarcopenia, Hand grip strength, Anthropometric measurement, Thermal Camera imaging, Infrared thermography

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Footnote: The Testo 865 thermal camera temperature detection device used in this study was obtained from the BAP project with the number PYO.TIP.1907.20.002.

## Computed Tomography Findings of Mesenteric Panniculitis and Accompanying Pathologies

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### Abstract

To evaluate concomitant pathologies in patients diagnosed with mesenteric panniculitis (MP) on computed tomography (CT).

In this retrospective study, patients who were reported as mesenteric panniculitis (MP) by USG and CT between August 2018 and November 2022 were scanned from the PACS system. The clinical findings, white blood cell (WBC), accompanying CT findings and chronic diseases of the patients who were confirmed to have MP by CT were recorded.

There were 70 patients diagnosed with MP by CT. 37 women (52.8%) and 33 men (47.2%), median age was 55.7 (26-90). The most common symptom of the patients was abdominal pain (68.5%). WBC was often normal (84.3%). Findings supporting the diagnosis of MP on CT: high-density fat mass (100%) pushing adjacent structures in the mesentery, sub-centimeter lymph nodes (100%) within the fat mass, hypodense halo surrounding the mesenteric vascular structures and lymph nodes (ring sign, 85.7%), and hyperdense pseudocapsule surrounding the mass fat (92.8).

Hypertension (HT), morbid obesity, diabetes mellitus (DM), coronary artery disease (CAD), malignancy, chronic obstructive pulmonary disease (COPD) were the accompanying chronic diseases in order of frequency. In CT examination, nephro/ureterolithiasis (18.5%) was the most common accompanying pathology. Concurrent malignancy was detected in only 2 patients (2.8%).

According to studies in the literature, MP was thought to develop secondary to various malignant and benign conditions. It is important for radiologists to know the diagnostic criteria of MP in CT and to evaluate its relationship with surrounding structures.

**Keywords:** Mesenteric panniculitis, ring sign, pseudocapsule, Computed Tomography, ureterolithiasis.

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## Evaluation of Meniscus Tears with Magnetic Resonance Imaging

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### Abstract

Magnetic Resonance Imaging (MRI) is the imaging modality of choice for detecting traumatic or non-traumatic meniscal tears. Correct identification of the meniscal tear guides the treatment of the patient in surgical planning, and therefore the role of MRI is important. The correct diagnosis of meniscal tears also significantly affects the planning of the patient's treatment and subsequently the patient's quality of life. Because after meniscus damage, especially articular cartilage becomes more vulnerable to stress and trauma and may result in early osteodegenerative arthritis. The frequency of meniscal tears increases with age. Generally, meniscal tears are associated with degenerative joint diseases. Meniscal tears are more common especially in the medial meniscus and posterior horn. However, trauma-related meniscal tears are more common in younger patients and in the lateral meniscus. Meniscal tear patterns can be classified as horizontal, longitudinal, radial, root tear, bucket handle tear, or a combination of these. In the case of an increase in the intra-meniscal signal reaching the articular surface from the meniscus in two consecutive images or in two coronal and one sagittal MRI sequences in the same localization, a meniscal tear can be said. Although it is rarely difficult to detect, indirect findings such as accompanying parameniscal cyst, subchondral bone marrow edema, and extrusion of the meniscus also help the diagnosis. The purpose of this presentation is to review the MRI parameters for normal meniscal anatomy and to summarize the MRI diagnostic and classification criteria for various meniscal tears.

**Keywords:** Magnetic Resonance Imaging, meniscal anatomy, meniscal tears, parameniscal cyst, radiology.

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## Antenatal Ultrasonography Findings in the Fetus Developing Meconium Peritonitis Pseudocyst: A Case Report

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### Abstract

Meconium peritonitis is chemical peritonitis developing secondary to intrauterine bowel perforation. Pseudocyst formation occurs with the self-limitation of the perforation. Its incidence is rare, being 1/30000. Perforation may be caused by ischemia, intestinal anomalies, viral infections or cystic fibrosis. Small bowel pathology is present in 50% of cases. Intestinal pathologies with risk of perforation are atresia, meconium ileus, volvulus and intussusception. Ultrasonographic findings may differ according to the severity, time and etiology of the perforation. The most common clinical presentation in the fetus is peritoneal calcification or abdominal cysts. Other findings are ascites, dilated bowels and polyhydramnios. The prognosis is much better for the fetus than for the newborn. In the intrauterine period, the perforation closes spontaneously, and recovery without sequelae can be observed in the postnatal period.

G3 P2 A0 Y2, a 30-year-old unfollowed pregnant woman was referred to our clinic at 28 weeks of gestation due to an abdominal cyst. During the ultrasonographic examination, a cystic formation covering most of the intra-abdominal area of the fetus and having calcified, irregular and thick walls, and leveled echogenic debris material inside was noticed. Figure 1. There were aperistaltic dilated bowel loops filled with fluid around the cyst. The amniotic fluid index had increased. Figure 2. Findings suggested that perforation developed secondary to bowel obstruction and this caused pseudocyst formation. Normal spontaneous vaginal delivery with premature rupture of membranes and preterm labor occurred at 30 weeks. Prenatal diagnosis of the newborn with abdominal distension was confirmed by ultrasonography performed in the neonatal period. The operation was planned by the postpartum pediatric surgeon, the perforation area was resected and ileoileal anastomosis was performed.

Prenatal diagnosis in cases with meconium peritonitis is important in terms of providing delivery in a well-equipped hospital with neonatal intensive care unit and pediatric surgery clinic.

**Keywords:** meconium peritonitis, pseudocyst, perforation, prenatal diagnosis

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## Usage Opportunites of Total Mixed Ration (TMR) in Small and Large Ruminants

*Hasan Hüseyin ŞENYÜZ<sup>1\*</sup>*

### Abstract

Total mixed ration (TMR) has been used in animal nutrition for many years around the world, it has recently started to take attention TMR is the consumption of a daily nutrient requirement of the animal as a whole mixture. The mixture should contain all the daily needs of the animal such as roughage, concentrated feed, vitamins, minerals etc. TMR provides benefits such as protection of rumen health, saving in feed costs, and controllability, as well as allowing the use of regional wastes as animal feed. In this way, difficulties in accessing quality roughage as a result of the decrease in water resources in the world and drought can be reduced. It is a feeding method that can be used in all ruminant animals. While the use of TMR offers some advantages to enterprises, there are also situations that can be considered as a disadvantage. In addition to studies such as comparing TMR with the traditional feeding method, adding different additives to TMR, packaged TMR studies have been carried out recently. TMR can be prepared fresh daily, or it can be preserved by making stretch packs (ensiled TMR) for longer storage. In this review, the use of TMR in ruminant animals such as dairy cattle, beef cattle, buffalo, sheep and goats has been examined in detail.

**Keywords:** Total mixed ration (TMR), small ruminant, large ruminant.

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\* This work is summarized from the author's article of the same name.

## Investigation of *Pseudocapillaria Tomentosa* in *Cyprinus Carpio* From Çankırı Province

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### Abstract

*Pseudocapillaria tomentosa*, is one of the nematode species that parasitizes in the digestive tract and intestinal tissues of *Cyprinus carpio* fish. Like other parasites, it negatively affects fish health. It causes symptoms such as ulcers, anemia and hemorrhage in the intestinal and digestive tracts in adult cyprinids while cause high mortality in juvenile cyprinids and zebrafish. There is a lot of investigation about *P. tomentosa*, which reported many water resources in our country but; there is not an investigation about *P. tomentosa* in Çankırı province.

In this study, total 20 carp caught in July 2021 by sportive fishing during the period when there was no fishing ban. The stations established on Alparsı Pond, Kızılırmak River (3 stations), Hacı Osman Farm, Seydiköy Dam, Ekinne Pond and their coordinates were marked. Caught fish necropsied at the stations and their digestive cavities and intestines put in 70% ethanol and brought to the laboratory for microscopic examination.

As a result of this examination, *P. tomentosa* was found in 2 of 20 *C. carpio* and 2 in total in fish caught only from Alparsı Pond. In addition to, percentage of infection % 10, infection density 1 unit and the infection abundance calculated 0.05 pieces and the parasites were identified morphologically by making the necessary measurements. Consequently, it is necessary that thought that must have more investigation about on this subject and take necessary preventive and treatment measures.

**Keywords:** Çankırı, *Cyprinus Carpio*, *Pseudocapillaria tomentosa*

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## Effect of Anaerobic Trainings on Paraoxanase 3 (pon3) Activity and Role of PON3-A665G Polymorphism

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Burak Durmaz<sup>6</sup>

### Abstract

Coronary heart disease (CHD) is one of the main causes of death in the world. Paraoxanase (PON) enzyme family (PON1, PON2 and PON3) have antioxidant and antiatherosclerotic properties. It is reported that protein levels and activities of the PON1 enzyme are modified by aerobic training, however the effects of anaerobic training on PON3 enzyme and the role of PON3 gene A665G polymorphism (PON3P) are not yet known. In this study, the effects of anaerobic training on the protein level and the lactonase activity (LA) of serum PON3, high-density lipoprotein (HDL) level and LA of its subgroups (HDL1A, HDL2LA, HDL3LA) and the role of PON3P in these effects were investigated. The group of male athletes (handball, basketball, volleyball) doing regular anaerobic training (AG: n=36, age=20.56 ± 2.42 years) and the control group (CG: n=39, age= 22.26 ± 3.44 years) were included in the study. After the anthropometric (height, weight, and body mass index (BMI)) measurements, the YOYO IR-1 test was applied. In addition, the protein levels of PON3 enzyme and oxidized LDL (oxLDL), (by ELISA method), the activity of PON3 enzyme (by spectrophotometric methods), HDL level, HDL1A, HDL2LA, HDL3LA (by kinetic methods), total oxidant/antioxidant status (TOS/TAS) and OSI = oxidative stress index (TOS/TAS ratio) and the specified polymorphism (from genomic DNA samples) were determined.

While serum LA (p=0.050), serum PON3LA (p=0.028) and PON3 (p=0.023) protein levels of AG were lower than CG, oxLDL (p=0.029) and OSI levels (p=0.34) were higher. In athletes; PON3P's G carrier group (AGc), serum LA (p=0.017), serum PON3LA (p=0.040), HDLPON3LA (p=0.032), HDL3LA (p=0.023) and serum PON3 protein levels (p=0.027) were significantly lower than control groups (CGc). In control groups; HDL1A (p=0.041), HDL3LA (p=0.005) and serum PON3 (p=0.008) protein level of PON3P homozygous group for AA (CAA), (p=0.041) were lower than the G carrier group (CGc).

In conclusion these findings indicate that chronic anaerobic training adversely affects the serum oxLDL and PON3 status of athletes. Although the G carrier group of PON3P has a genetically better LA than the AA homozygous group, lower levels of PON3 may be due to oxidative stress (OS) during training with high-intensity loads. Also PON3P may have a role in the effects of anaerobic training on serum and HDL and LA of its subgroups. These findings are the first in the literature.

**Keywords:** Paraoxanase 3, Paraoxanase polymorphism, Anaerobic training, Lactonase activity, Coronary heart disease.

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## Cystic Endometrial Hyperplasia and Pyometra in Dogs

Müge TUNCAY<sup>1</sup>

### Abstract

Pyometra is a frequently diagnosed bacterial infection of the uterus in intact bitches, sexually mature bitches, leading to the accumulation of purulent material in the uterine lumen. It has different names such as; cystic endometrial-pyometra complex, chronic endometritis and chronic purulent metritis. Cystic endometrial hyperplasia; it describes endometrial hyperplasia and increased secretion and dilation of glands in the endometrium. The most valid theory for the formation of pyometra is a result of hormonal imbalance in the luteal phase or an abnormal response to normal levels of progesterone and estrogen in the animal's body; it is a phenomenon of hyperplasia of endometrial epithelial cells and increased bacterial adhesion. Pyometra is of two types as open (purulent vulvar discharge) and closed cervix pyometra (accumulation of purulent contents in the uterus without vulvar discharge). The clinical findings of closed cervix pyometra are more aggressive than open cervix pyometra. Since there is no vulvar discharge, the uterus is greatly enlarged. The prognosis for refractory hypotension worsens if treatment is inadequate. Myocardial failure and death are encountered with severe endotoxemia. It causes multi-organ failure by affecting other systems. Pyometra treatment is shaped as medical, conservative and combined treatment. Ovariohysterectomy is the most preferred treatment method, especially for closed cervix pyometra. As medical treatment; includes natural or synthetic PGF-2 $\alpha$  and/or aglepristone, progesterone receptor blockers of antigestagens and supportive treatments such as antibiotics. So far, no study has done medical treatment; determining blood in the uterus did not reveal how vascular and morphological examination altered positive transitions. In the study of Filho et al., 2021 in n=14 open pyometra patients with this condition, it was determined that aglepristone and cloprestonol treatment applied in combination before ovariohysterectomy; they stated that it is more successful in restructuring the endometrium, and that cystic formations and vascularization are less structured.

**Keywords:** Pyometra; Uterus; Diestrus; Cystic endometrial hyperplasia; Endotoxemia

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## Investigation of the Relationship of Smart Phone Addiction with Depression and Anxiety Score: Manisa Province, Soma District Case

Ender ŞENOL<sup>1</sup>  
Celal EREN<sup>2</sup>

### Abstract

**Purpose:** The aim of the research is to investigate the Addiction dimension of the use of Smartphones, which is becoming increasingly common today, and to reveal the relationship of Smartphone Addiction with mental disorders Anxiety and Depression. **Method:** 400 people over the age of 18 and using smart phones, residing in Soma District of Manisa Province, participated in the research. Participants were evaluated with the Democratic Data Form, Smartphone Addiction Scale - Short Form (ATBI - SF), Beck Depression Inventory (BDI), and Beck Anxiety Inventory (BAI). **Results:** In the study, a statistically significant positive correlation was found between Smartphone Addiction Scale scores and Beck Depression Scale scores ( $r=0.286$ ,  $p<0.01$ ). A statistically significant positive correlation was found between the participants' ABI-SF and BAI scores ( $r=0.157$ ,  $p<0.01$ ). ABI-SF mean scores do not differ statistically significantly according to gender ( $Z= -0.51$ ,  $p=0.656$ ). **Conclusion:** A statistically significant relationship was found between Smartphone Addiction and Depression and Anxiety.

**Keywords:** Smartphone, Addiction, Anxiety, Depression, Soma

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## ANLN Expression in Senescent Fibroblast Cells

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*Nebir ÖZDEMİR ÖZGENTÜRK<sup>3</sup>*

### Abstract

Aging is the inevitable time-related physiological integrity loss that effects every human. In the last decades an increase in human lifespan has been recorded, and further rise is expected. Unfortunately, the lifespan increase has been associated with the increase in age-related diseases. 75% of ageing is affected by extrinsic factors. A very important part of these factors is the diet a person consumes. For years the effects of nutraceuticals on health and lifespan have been discussed. Curcumin is among most used nutraceutical for the treatment of different medical conditions, including aging and age-related diseases. In the experimental group a 1  $\mu$ M curcumin dosage was added at the 30th passage in the foreskin fibroblast cell culture that reached senescence in the 37-39th passage. Just prior to senescence, the anti-aging effect of the curcumin treatment on ANLN gene expression was examined. ANLN gene codes for anillin protein, which plays an important roles in cell cycle, mitosis, cellular senescence and p53 signaling pathways. After RNA isolation, ANLN gene expression profiles were demonstrated by Real-Time PCR.

Mtt cell viability test was used to find the right concentration for the curcumin treatment and to study the hormetic effects of curcumin. We concluded that curcumin decreases cell viability in high concentrations (15  $\mu$ M >), showing again a hormetic effect. Curcumin did not delay senescence when added late in the cell culture but increased the ANLN gene expression as expected.

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**Keywords:** curcumin, aging, human skin fibroblasts, nutraceuticals, senescence.

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## Biochemistry, Biological Functions and Side Effects of 5-hydroxytryptophan as a Serotonin Precursor

*Başak GÖKÇE<sup>1</sup>*

### Abstract

Serotonin plays a role in many vital functions, including mood, sleep, activity, appetite, daily rhythm, and neuroendocrine functions. Serotonin consists of the amino acid tryptophan, the main source is dietary protein. Tryptophan has proven remarkably effective in relieving symptoms of depression, but the Food and Drug Administration (FDA) banned tryptophan from sale after caused known as eosinophilia-myalgia syndrome (EMS) in 1989. Another substance has emerged as a more reliable precursor to serotonin: 5-hydroxytryptophan (5-HTP). It shows that 5-HTP is a faster serotonin precursor than tryptophan. So, that 5-HTP is more directly linked to serotonin production.

It has been stated that 5-HTP plays an important role in both neurological and metabolic diseases. The physiological activity of 5-HTP has been investigated in both clinical and animal studies. It has been shown that 5-HTP may be useful in the treatment of depression, anxiety, panic, sleep disorders, and obesity.

Although the short-term use of 5 HTP is effective, its significant side effects occur with long-term use. The use of 5-HTP alone reduces most catecholamines. If the dopamine reduction is too great, over time 5-HTP may not be able to work. An increased dose of 5-HTP used to increase serotonin levels increases MAO activity. There are theories and studies showing that an increase in dopamine without an appropriate balance can lead to depletion over time. Since the administration of 5-HTP alone facilitates the depletion of neurotransmitters, 5-HTP should be used with caution in patients.

**Keywords:** serotonin, 5-hydroxytryptophan, tryptophan, neurotransmitter

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## Diclofenac Induced Liver Injury Assessment in Zebrafish Model

Çiğdem KARAKOYUN<sup>1,2</sup>

Gülçin ÇAKAN AKDOĞAN<sup>1,3</sup>

### Abstract

Drug induced liver injury is a challenging liver disease frequently caused by herbs and drugs as an adverse reaction. However, predicting and early detection of drug induced hepatotoxicity is often difficult as toxicity is observed in a dose-independent manner and is idiosyncratic. Therefore, performing reliable and fast test procedures are needed to assess the idiosyncratic hepatotoxicity of drugs. Zebrafish is a promising *in vivo* model to assess acute toxicity of xenobiotics offering advantages such as rapid and cost-effective test methods and imaging of liver in an intact living organism. Diclofenac is a non-steroidal anti-inflammatory drug which causes severe hepatotoxicity leading to various chronic hepatic disorders including liver failure. In the present study our aim was to evaluate zebrafish larval liver model for studying diclofenac-induced liver toxicity. A widely used DILI agent acetaminophen was used as positive control. To this end, zebrafish larvae (n=10) of a liver reporter line were exposed to different concentrations of diclofenac sodium (1-8  $\mu$ M) and 5 mM of acetaminophen, between 2-5 dpf or 5-6 dpf. Liver images were recorded, and size change was quantified with ImageJ software. It was found that exposure to 8 $\mu$ M diclofenac between 2-5 dpf caused 90 % mortality, whereas exposure to 4  $\mu$ M did not affect survival. However, liver size was not affected significantly when 4  $\mu$ M or lower doses of diclofenac was applied. On the other hand, exposure between 5-6 dpf did not cause any mortality, and caused a significant decrease of liver size when 1-8  $\mu$ M diclofenac was applied. These findings indicate that for better assessment of hepatotoxicity use of 5 dpf larvae may be preferred. Zebrafish larval liver is specified at 2 dpf and completes maturation by 5 dpf, and application of drugs onto larvae with functional liver may be required to conduct a functional analysis. This is the first report, to our knowledge, to demonstrate diclofenac-induced liver injury via liver size measurement on zebrafish model.

**Keywords:** Zebrafish, Liver, Toxicity, Diclofenac, Drug induced liver injury

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## GC-MS analysis of essential oil from *Thymus kotschyanus* var. *glabrescens*

Ceren EMİR<sup>1</sup>

### Abstract

Medicinal and aromatic plants have an essential role in primary health care owing to their wide variety of biological activities connected with their usages among the local populations. Researchers have studied essential oils obtained from these plants for years. It is known that the genus *Thymus*, which is in the Lamiaceae family, is rich and diverse in essential oil, and its essential oil composition has large amounts of antioxidant and antimicrobial-acting thymol and carvacrol components. *Thymus* species are used as antiseptics in pharmaceutical preparations and also as flavoring ingredients in food products. Based on this, *Thymus kotschyanus* var. *glabrescens*, which is one of three varieties of *T. kotschyanus*, has been investigated for essential oil content by a GC-MS experiment. In this study, a total of twenty-six compounds were identified according to mass spectrum data and, carvacrol (69.81 %), cymol (5.77 %), 1,8-cineole (4.996 %), *trans*-caryophyllene (3.83 %) and terpinene (3.5 %) were calculated as the major among them. It has been seen in the literature that the species studied and collected from different locations show similarities and differences in their content. As a result, this *Thymus* species grown in Malatya may be considered a natural essential oil source alternative because it contains high levels of carvacrol.

**Keywords:** *Thymus kotschyanus* var. *glabrescens*; essential oil; GC-MS; carvacrol; cymol

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## Volatile Oil Analysis from Endemic *Sideritis Galatica* Bornm.

Ceren EMİR<sup>1</sup>

### Abstract

The genus *Sideritis* L., which belongs to the Lamiaceae family, is represented by more than 150 species in the world. They spread especially in the Mediterranean area covering our country. In Turkey, this genus has 45 species and 8 subspecies with more than 80 % endemism ratio. The members of *Sideritis* L., is known as “ada çayı”, “dağ çayı” in Anatolia, with the use of herbal tea in ethnomedicine. The infusion form of this herbal tea is used as not only diuretic, antispasmodic, anti-inflammatory, antimicrobial, sedative, and carminative agent but also in the treatment of common colds including fever, flu, bronchitis. *Sideritis* species contain diverse secondary metabolites groups including phenolics, terpenes, coumarins, lignans so that they possess different biological activities. Approximately 50 *Sideritis* species have been examined for their essential oil and the principal components of those were subgrouped according to the GC-MS analysis. In this study, 17 volatile constituents of an endemic *S. galatica* from Bitlis-Hizan province in Turkey have been reported and monoterpene type thymol (32.86 %) was found as a major component, differently. Additionally, sesquiterpene type compounds such as (-)-caryophyllene oxide (14.28 %), *trans*-caryophyllene (12.39 %), and diepicedrene-1-oxide (5.59 %) were detected in rich amounts in accordance with the literature.

**Keywords:** *Sideritis galatica*; essential oil; GC-MS; endemic; sesquiterpenes

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## Investigation of Wound Healing Potentials of *Lysimachia verticillaris* and *Lysimachia vulgaris*

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Merve BADEM<sup>2</sup>

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Engin YENİLMEZ<sup>8</sup>

### Abstract

The genus *Lysimachia* (Primulaceae) is represented by 8 species in the flora of Turkey. *Lysimachia* species with their rich phenolic and flavonoid content are used among the public as wound healing, antipyretic and pain reliever.

In this study, the wound healing potential of *L. verticillaris* and *L. vulgaris* plants was investigated in vivo with the "Circular Excision Wound Model". Rats control, positive control, 1% *L. verticillaris* aqueous extract, 5% *L. verticillaris* aqueous extract, 1% *L. vulgaris* aqueous extract and 5% *L. vulgaris* aqueous extract were divided into 6 groups (n=8). After circular wounds were made on the rats, ointment was applied to the other groups except the control group every other day and wound healing was observed. At the end of the 14th day experimental period, all animals were euthanized by anemia. In this study, the reduction in the wound area was calculated using the AutoCAD program. In the observations, it was determined that the effect of the prepared ointments on wound closure was better than the madecassol group used as a positive control.

Histopathological analyzes were performed on scar tissue obtained from rats. There was no difference between the groups in terms of epithelialization. When the inflammation levels of the groups were evaluated, it was higher in the control group, but there was no significant difference between the other groups. This indicates that inflammation is greatly regressed and inflammatory cells are replaced by fibroblasts. In addition, it was observed that in some groups the recovery was partially more advanced and skin appendages began to form.

This is the first in vivo study of the wound healing potential of the species, increasing to the originality of the research. The data obtained from the study show that the species can be evaluated in the development of wound healing drugs.

**Keywords:** *Lysimachia*, Primulaceae, Wound healing

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## Clinical Results of Sacral Double Screw Technique in Posterior Lumbosacral Fixation

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*Cumhur KILINÇER<sup>2</sup>*

### Abstract

This study aimed to evaluate the clinical results of the sacral double screw technique in patients who underwent posterior lumbosacral fixation operations.

Thirteen patients who underwent sacral double screw therapy and 13 patients who matched the single screw technique for parameters presumed to affect clinical outcomes were identified. Visual Analog Scale, Oswestry Disability Scale, patient satisfaction scores, operation time, amount of bleeding and instrument system problems were analyzed.

The sacral double screw group had higher patient satisfaction and recovery levels in pain scores. In the sacral double screw technique, the mean operation time was longer. The higher rate of interbody fusion in the double screw group may have affected the results. Instrument problems were detected in one (8%) patient in the case study group and three (23%) patients in the control group. Although there was a halo around the screw in all four problems, no broken screw/rod or displaced screw was observed.

There was no statistically significant difference between the study and control groups in 12 of 13 parameters that may affect clinical results. Although increased operative time and bleeding amounts are expected disadvantages for almost all additional interventions, it is appropriate to consider the benefit/risk ratio to determine the expected benefits in clinical practice. One patient in the case study group and one in three patients in the control group had an intervention for interbody fusion. Higher pain, disability, and patient satisfaction scores in these cases were interpreted as an effect of interbody fusion, compensating for the non-fusion and limiting undesirable clinical outcomes.

Sacral double screw technique positively affects fusion, instrument failure rates and disability scores. Further studies with larger samples are needed to explain the predicted adverse effects.

**Keywords:** Double screw, fusion, implant failure, sacrum, spine

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## Radiofrequency Ablation Treatment in Patients with Lumbar Spinal Stenosis Unresponsive to Medical Treatment

*Rıdvan AÇIKALIN<sup>1</sup>*

### Abstract

Lumbar spinal stenosis is one of the most common degenerative pathologies at the lumbar level of the spine. Our aim is to evaluate the efficacy of radiofrequency ablation (RF) in patients with low back pain due to treatment-refractory lumbar spinal stenosis (LSS).

Between January 2020 and June 2022 in our clinic, 30 chronic patients, aged 20-70 years, were included in the study retrospectively. Patients with LSS pathology who did not undergo surgery and whose low back pain could not be relieved by medical and physical therapy methods for at least 6 months were included in the study. All patients were evaluated with the Visual Analogue Scale (VAS) for low back pain before the procedure, at the 1st month and at the 3rd month after the procedure.

30 patients (16 men, 14 women) were included in the study. The mean age of the cases was 64.1 (20-70 years). Eighteen patients (60%) were over 65 years of age. The lumbar joint VAS values before the RF procedure were compared with the facet joint VAS values at the 1st and 3rd months after the procedure, and there was a statistically significant difference between them. Pre-procedure facet joint VAS values are higher than post-procedure facet joint VAS values. The pain of 2 patients who underwent the procedure did not go away, and other conventional treatment methods were continued in these patients. In 2 patients who were processed, the procedure could not be performed due to anatomical disorders. No complications developed as a result of the procedures.

In conclusion, in this study, we evaluated that RF ablation in patients with facet joint pain statistically significantly reduced the VAS values at the 1st and 3rd months, could be applied without complications and was highly applicable.

**Keywords:** Radiofrequency ablation, low back pain, lumbar spinal stenosis

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## Effects of the Covid 19 Pandemic on Cts Surgical Treatment and Electrophysiological Evaluation

*Aydın SİNAN APAYDIN*

*İnci EKİCİ*

### Abstract

Carpal tunnel syndrome (CTS) is a common nerve entrapment neuropathy. There are underlying causes such as DM, connective tissue and thyroid diseases, pregnancy and occupational factors. Clinically, severe night pain involving the index, middle and thumb, numbness and symptoms up to weakness in the hand muscles are seen. Clinical findings, physical examination and electrophysiological examinations guide the diagnosis and treatment. Surgery can be planned according to the clinical and electrophysiological severity of the disease and the response to the treatment. In our study, it was aimed to evaluate CTS patients who underwent surgery at different periods of the social isolation process in the COVID-19 pandemic.

In our study, 34 patients (Group-I) who were operated on with the diagnosis of CTS in the Karabük Training and Research Hospital Brain and Nerve Surgery and Neurology polyclinics during the period of intense isolation and precautions during the COVID-19 pandemic (March 2020 - December 21), and their precautions decreased (2022 January-2022 July).) were included in 29 patients (Group-II) who were operated on. Demographic and clinical information of the patients including age, gender, occupation, disease, duration of symptoms, treatments, electrophysiological examinations were recorded. Fisher precision test and Mann-Whitney U test were used to compare the groups. The p-value was set as 0.05 as the limit of significance.

In our study, a total of 83 median nerve decompression applied to 63 patients and preoperative electrophysiological data were evaluated. There were 28 women (82.3%) and 6 men (17.7%) in Group I, 26 women (89.7%) and 3 men (10.3%) in Group II. The median age was 55 (31-92) in Group I and 60 (35-85) in Group II. There was no significant difference between the two groups in terms of gender and age distribution, and in CTS severity scores determined by preoperative conduction EMG ( $p>0.05$ ). Median nerve sensory conduction amplitude (Group I:  $5.7\pm5.5$ , Group II:  $4.1\pm4.5$ ), sensory conduction velocity (Group I:  $23.0\pm15.9$ , Group II) between both groups :  $21.7\pm16.3$ ), motor conduction distal latency (Group I:  $5.5\pm2.3$ , Group II:  $5.7\pm2.3$ ), motor conduction amplitude (Group I:  $4.1\pm2.3$ , Group II:  $4.05\pm2.5$ ), and motor conduction velocity (Group I:  $44.4\pm11.6$ , Group II:  $44.3\pm10.7$ ) ( $p>0.05$ ).

With the onset of the COVID pandemic, difficulties in transportation to hospitals and delays in the treatment of many diseases have arisen due to the intensity and isolation measures in hospitals. There was no significant difference between the electrophysiological characteristics and severity of the CTS patients who were operated during the period of the effect of the pandemic and the measures were intense, and the CTS patients who were operated during the period when the measures were relaxed. In our hospital, where CTS surgery was performed in our city, more median nerve decompression surgeries were performed in the first 6 months of 2022 compared to the 21-month period when prohibitions were intense. It is thought that there was no significant increase in the severity of CTS with the pandemic, and that the pandemic showed itself as a decrease in the number of surgeries in CTS patients due to the difficulty of reaching the hospital.

**Keywords:** CTS, peripheral nerve, neuropathy

## Steroid Therapy in Chronic Subdural Hematomas

Can SEZER<sup>1</sup>

### Abstract

Chronic subdural hematoma is one of the most common types of intracranial hemorrhage. It usually develops secondary to previous traumas. The prognosis is good when properly treated.

The files of patients who were surgically treated with the diagnosis of chronic subdural hematoma in our clinic between January 2020 and October 2022 were retrospectively reviewed. Cases with neurological deficits were not included in the study. The cases considered for surgical intervention were divided into 2 groups. In group 1, 15 cases were treated with single or double burr-hole craniostomy. In group 2, 15 patients were treated with 2x50 mg daily hydrocortisone.

30 cases (17 men, 13 women) were included in the study. The mean age of the cases was 61.2 (17-92 years). 21 patients (67%) were over 65 years of age. The presenting complaints are headache, epilepsy and dizziness. The most common complaint was headache (95%). Trauma history was present in 26 cases (93%), 42% of the patients also had a chronic disease. While cure was achieved in 12 patients in Group 1, complications developed in 3 patients (seizure, epidural hematoma on the opposite side of the operation, intracerebral hemorrhage, meningitis). In Group 2, cure was achieved in 9 cases, and surgical intervention was required in 6 cases. Complication developed in 1 patient in group 2 (increased stress).

Burr-hole craniostomy is a simple, easy and low complication treatment method in the treatment of chronic subdural hematoma. However, hydrocortisone treatment should be considered in patients with no deficits and high-risk surgery because of its low complication rate and non-invasiveness.

**Keywords:** Burr-hole craniostomy, chronic subdural hematoma, surgery, hydrocortisone

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## Pediatric Periorbital Calvarial Tumor Excision via Eyebrow Approach: Case Report

Evren AYDOĞMUŞ<sup>1</sup>

### Abstract

Seven-year-old boy presented with a headache for the last 2 months. Neurological and laboratory examinations were normal except for smooth tissue swelling at the left supraorbital region. Radiological examinations revealed hyperostosis at the superior and lateral walls of the left orbit.

The excessive tumour-like part of the roof and lateral walls of the orbit were excised through a mini-incision on the left eyebrow. The postoperative period was uneventful. The pathological examination revealed Langerhans cell histiocytosis.

Langerhans cell histiocytosis (LCH) is a rare histiocytic disorder, sometimes characterised by single or multiple osteolytic bone lesions with unknown pathological processes. Whereas it is seen at any age, it's diagnosed mainly in infants and adolescents. The clinical findings dissent consistently with the concerned organ system. Whereas the bones are usually involved, skin, body fluid nodes, liver, spleen, oral membrane, lung, and central nervous system are the other targets of the disease. The pathological examination of the affected tissue reveals the definitive identification of the LCH. A very rare localization for Langerhans cell histiocytosis presented in a pediatric age group and the tumour-like lesion was excised via a minimal invasive approach.

**Keywords:** Pediatric, Calvarium, Eyebrow approach

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## Effect of Valproic Acid on Vasospasm at Experimental Subarachnoidal Hemorrhage Model

*Celal Özbek ÇAKIR<sup>1</sup>*

*Ayhan KOÇAK<sup>2</sup>*

### Abstract

The main purpose of our study was to observe the changes occurring on arterial walls due to experimental SAH (**Subarachnoidal hemorrhage**) model and to investigate the effects of valproic acid on the basilar artery and brain tissues to prevent these changes and vasospasm. The aim of the current study was to evaluate effect of valproic acid on vasospasm at experimental subarachnoidal hemorrhage model. We used 24 New Zealand rabbits. Animals were randomly divided into three groups as control (C), subarachnoidal hemorrhage (SAH) and valproic acid (VPA) groups. Cisterna magna puncture was done to all animals. SAH occurred by giving non heparinised autologous blood except control group. 100 mg/kg of Valproic acid was given intra peritoneally to treatment group. All animals were sacrificed after 48 hours. Our expectation was the arterial lumen area of SAH group will be smaller than control group. After statistical calculations we found that our expectation was similar with our findings that the smallest artery lumen was seen in SAH group and the largest artery lumen was seen in control group. These differences were statistically significant. Our findings showed that Valproic acid can prevent vasospasm by preventing arterial wall changes induced by SAH. It may be clinically beneficial at patients suffering from vasospasm due to SAH.

**Keywords:** Brain damage, neuroprotective effect, subarachnoid haemorrhage, valproic acid, vasospasm

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## The Importance of Stress Coping Skills in the Period of COVID 19

Ayşe GÖKTAŞ<sup>1</sup>

### Abstract

The aim of the research is to determine the effects of individuals' Perceived Stress levels and their Skills of Coping with Stress in the COVID-19 outbreak on Perceived Stress in Turkey.

In the study, data were collected with a questionnaire form distributed to individuals online. In addition to the demographic characteristics of the participants, the Perceived Stress Scale (PSS) and the Stress Coping Style Scale were used. 214 individuals were reached using the online survey method.

The survey was completed by 214 individual (mean age  $31.57 \pm 12.79$  years, 73.8% female). The total score of Stress Coping Style is  $44.20 \pm 9.42$ . The average score for Perceived Stress Perception Scale was  $28.44 \pm 7.763$ .

It was seen that the Stress Perception Score of 28 individual (13.06 %) was between 14-28 (mild), 166 (70.6 %) were in the range of 28-42 (moderate), 20 (9.3%) were in the range of 42-56 (severe). Individuals use the Self-Confidence Approach(S.C.A. ) more than the subgroups of the Stress Coping Style (SCS) subgroups. The scores of the individuals participating in the study from the sub-categories of the " Stress Coping Style " are respectively; S.C.A.  $13.65 \pm 4.31$ , for the Helpless Approach( H.A.)  $10.51 \pm 4.18$ , for the Optimistic Approach(O.A.),  $8.39 \pm 2.75$ , for Submissive Approach (S.A.)  $5.66 \pm 2.85$  and  $6.17 \pm 1.94$  for Social Support (S.S). They used the least S.S.and S.A approach.

A positive correlation was found between stress perception and social support, which is the sub-parameter of the coping with stress scale ( $p=0.014$ ,  $r=0.171$ ).

It is predicted that strategies such as social support and improve Stress Coping Style skills play an important role to keep people's stress balance or reducing along that period COVID-19.

**Keywords:** COVID-19 Outbreak, Coronavirus, Psychological Effect, Stress Coping Skills, Stress Perception

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# International Congress of Medical and Health Sciences Studies

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## A Serological Survey of SARS-CoV-2 in Cats and Dogs in Türkiye

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Aykut ÖZKUL<sup>2</sup>

Kadir YEŞİLBAG<sup>3</sup>

### Abstract

The COVID-19 pandemic, caused by the Severe Acute Respiratory Syndrome Coronavirus (SARS-CoV-2), has rapidly spread in global scale since late 2019. Meanwhile, SARS-CoV-2 infections of cat and dog species have also been reported. The high mutation rate of SARS-CoV-2 is important for examining the spread of the disease between species. Therefore, the study of infection and seroprevalence in animals remains important. In this study, we evaluated the presence of SARS-CoV-2 antibodies and antibody titers in 110 pet animals (58 cats and 52 dogs) with different living conditions (shelter, stray, household and contact with the COVID-19 patients) during the COVID-19 outbreak in Turkey (Bursa province) using the serum neutralization test. Out of 110 animals, 76 (69.09%) had antibody titers ranging from 1:5 to 1:40. Based on animal species, SARS-CoV-2 neutralizing antibodies were detected in 39 cats (67.24%) and 37 dogs (71.15%). Thirteen of these animals had an antibody titer over 1:20. By analyzing the background of pet animals tested in this study, 92.38% (12/13) of stray animals, 83.33% (15/18) of animals living in shelters, 63.88% (46/76) of animals living in households, and 42.86% (3/7) of animals in contact with COVID-19 patients were detected as seropositive. Although we detected high positivity rates among stray animals in close contact, the highest antibody titers (over 1:40) were detected in cats contacted with COVID-19 patients and a dog living in the house. This study and previous studies have shown the necessity of taking precautions to prevent both human-to-animal transmission and transmission between susceptible animals. In addition, our study provided further serological evidence for SARS-CoV-2 infection in pets in Türkiye and the presence of SARS-CoV-2 neutralizing antibodies in dogs with different living conditions was reported for the first time in the country.

**Keywords:** SARS-CoV-2; Seroprevalance; Pet animals; Public Health

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## Investigation of Quality of Life of Women with Breast Cancer Living in Kirkuk and Affecting Factors

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*Figen EROL URSAVAŞ<sup>2</sup>*

### Abstract

In women, breast cancer is one of the most common forms. Affects the physical, psychological, and social aspects of one's well-being.

This study aims to evaluate the quality of life of patients with breast cancer living in Kirkuk and the factors affecting it.

It is a cross-sectional and descriptive study. The study was conducted at the Oncology and Hematology Center in Kirkuk, Iraq. Data were collected face-to-face with the Sociodemographic and Clinical Characteristics Form and the WHOQOL-BREF Scale.

Results: The mean age of the female participants was  $45 \pm 19$ , and 28.7% had a high school graduate education. 67.3% were married, 77.3% were homemakers, 62.7% had less than expenses in income, and 96% did not smoke. Also, the female participants, 58.0%, were in the second stage, and 36.7% were diagnosed less than a year ago. 73.3% had a family history of the disease, and 80% did not use oral contraceptives. The majority of the participants, women, 78%, had children. The mean score for the WHOQOL-BREF scale was GQOL was  $5.6 \pm 2.9$ , the mean score for the environmental sub-dimension of the WHOQOL-BREF scale was  $26.0 \pm 4.1$ , the mean score for the physical sub-dimension of the WHOQOL-BREF scale was  $21.4 \pm 3.7$ , the mean score for the psychological sub-dimension of the WHOQOL-BREF scale was  $15.2 \pm 3.7$ . The mean score for the social relationships sub-dimension of the WHOQOL-BREF scale was  $8.2 \pm 1.9$ .

In our study, most patients were found to have a moderate QOL. Our investigation determined that the variables that affect the sub-dimensions of the WHOQOL-BREF scale and are statistically significant are marital status, education level, stage of disease BC, time of diagnosis, treatment methods received, and family history of BC. Our study found that smoking had no statistically significant effect on the WHOQOL-BREF scale's sub-dimensions.

**Keywords:** BC, QOL, Iraq, Influencing factors

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## Management of Type 2 Diabetes During the Covid-19 Pandemic

*Selma CEYLAN  
Gülay YILMAZEL*

**Abstract**

**Keywords:**

ICOMESS

## Knowledge Level of Police Officers About Testicular Cancer and Testicular Self-Examination

*Mert KARTAL<sup>1</sup>*

*Neşe KARAKAŞ<sup>2</sup>*

*Gürkan KAPIKIRAN<sup>3</sup>*

### Abstract

The aim of the study is to evaluate the police officers' health beliefs about testicular cancer and their level of knowledge about Testicular Self-Examination (SCT).

The data of the study were obtained on 120 volunteer male police officers. A questionnaire for descriptive information and Champion's Health Belief Model Scale for Testicular Cancer and Screening (CSIMO) were used to collect data. The data were analyzed using the SPSS package program and  $p < 0.05$  was considered significant.

84.2% of the participants were married, 14.2% had a family history of cancer, 36.7% had not heard of testicular cancer, 81.7% had not heard of SCT, and 87.5% did not perform SCT. The rate of those who do not know how SCT is done is 80.8%. Smokers have high perceptions of severity, benefits and barriers of SCT ( $p < 0.05$ ). Sensitivity perceptions were found to be higher in those with a family history of cancer and testicular problems ( $p < 0.05$ ).

It has been determined that there is a lack of information about testicular cancer and SCT in police officers. It is recommended that qualitative public health studies be carried out in larger samples in order to plan health education and to determine the factors that prevent the implementation of SCT in order to gain knowledge and transform the acquired knowledge into practice.

**Keywords:** Testicular Cancer, KKTm, Knowledge Level, Police Officers

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## Evaluation of Liquid Compartments and Edema Index in Type-2 Diabetic Nephropathy

Hasan Esat Yücel<sup>1</sup>

### Abstract

Bioimpedance analysis (BIA) is a non-invasive, non-expensive and easy-to-apply method that measures body compositions and cellular health levels based on the electrophysiological characteristics of the organism. It has diagnostic and prognostic significance in Type-2 Diabetes Mellitus and provides data on body components and metabolism. Our aim in the research is to examine the edema index, total body fluid, intracellular and extracellular fluid ratios in Type-2 diabetic nephropathy.

In the study, two groups were formed from patients diagnosed with Type-2 diabetic nephropathy (n: 20) and healthy volunteers (n:30) who were considered as the control group. Age, gender and body mass index (BMI) of the groups were recorded. After 8-10 hours of fasting, all participants were measured with a BIA device, total body fluid, intracellular and extracellular fluid amounts and edema index were measured. The mentioned variables were compared between groups. Statistical analyzes were performed using the Statistical Package for Social Sciences for windows (IBM SPSS version28.0, Armonk, NY, USA) software.

While edema index and extracellular fluid ratios were significantly higher in the diabetic nephropathy group ( $p<0.05$ ), total body fluid was higher in the healthy group ( $p<0.05$ ). There was no difference between the groups in terms of intracellular fluid ratio ( $p>0.05$ ).

BIA is a promising method that reflects body components and metabolism in nephropathy, which is the most common microvascular complication of Type-2 Diabetes Mellitus.

**Keywords:** diabetic nephropathy, edema index, extracellular fluid, bioimpedance analysis

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## The Relationship Between Stress Level and Life Satisfaction in Caregivers of Stroke Survivors

*Fatma ÖZKAN TUNCAY<sup>1</sup>*

### Abstract

Determining the problems experienced by caregivers of an individual having neurological health problems, investigating the stress experiences related to the care burden and the areas of life affected by stress; is an important dimension in improving the caregivers' quality of life. In this context, the purpose of the study was to investigate the levels of stress and life satisfaction in caregivers of stroke survivors and to determine the relationship between these two variables.

The study sample consisted of caregivers taking care of a stroke survivor in the neurology clinic of a university hospital during the period between 1 March 2022 and 1 June 2022, willing to participate in the study and meeting the sampling criteria. The data of the study were collected with the Patient and Caregiver Information Form, the Caregiver Stress Scale and the Life Satisfaction Scale. In the analysis of the data, appropriate statistical methods were used and the statistical significance level was taken as .05.

In this study conducted with caregivers of stroke survivors, stress levels of caregivers were found moderate, life satisfaction levels were found high and a negative moderate relationship was found between the two variables. However, the stress levels of caregivers perceiving their health as poor, having a one-year caregiving period and caring for a completely dependent patient according to the MBI were found significantly higher. It was determined that the life satisfaction levels of the caregivers caring for their parents and a completely dependent patient according to the MBI were significantly lower ( $p<0.05$ ).

In this study, caregivers of stroke survivors were found to have moderate stress levels and high life satisfaction levels, and it was found that there was a relationship between caregivers' stress level and life satisfaction.

**Keywords:** Stroke, caregivers' stress, life satisfaction

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## The Effect of Concept Map Technique on Students' Cognitive Load and Academic Success in Anatomy Course

Güneş Bolatlı<sup>1</sup>

### Abstract

Anatomy, a core course for medical students; examines the different parts of the human body and the relationship between them. It has lots of details to learn and memorize. Therefore, many students need alternative educational tools. Our aim; The aim of this study is to investigate the effect of concept mapping technique on anatomy learning. The students participating in the study consisted of two groups as Control (n=66) and Experimental (n=69). Before the training, both groups; Student introduction form and knowledge exam (pretest) on anatomy of the circulatory system were applied. Theoretical lesson was taught to the Control group using classical methods and to the Experimental group using concept maps. Afterwards, two groups were taken to the anatomy laboratory. The anatomy of the circulatory system was explained by the lecturer using a model. At the end of the lesson, the experimental group was asked to work with concept maps and the control group with textbooks and atlases for 3 days. After 3 days, knowledge exam (posttest) on anatomy of the circulatory system and cognitive load scale were administered to both groups. In the two groups, the post-test average was higher than the pre-test average, and the score increase was significantly higher in the experimental group than the control group. Considering the cognitive load averages between the control group and the experimental group; Cognitive loading of the control group was significantly higher than the experimental group. Concept maps are an educational tool that provides meaningful learning by concretizing information. In the study, it was seen that concept maps reduce cognitive load and increase academic achievement.

**Keywords:** cognitive load, concept map, gross anatomy education

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## Covid-19 and Obesity

Arzu GÜNTÜRK<sup>1</sup>

### Abstract

The risks of COVID-19 infection morbidity and mortality have not been elucidated yet. Obesity is supposed to be as an important risk factor for COVID-19 infection prognose. In this study we aimed to investigate the effects of obesity on COVID-19.

A total of 109 COVID-19 patients hospitalized in our hospital were included in this study. Patients were divided into two groups as the patients with a BMI $\leq$ 25 and those with a BMI $>$ 25 for six months before hospitalized. Demographic data, length of stay in the hospital and ICU, first and last laboratory tests, follow-up and treatment data were recorded and compared between the groups. PCR test results and CT scans findings were also recorded.

BMI $\leq$ 25 group included 50, the other group 59 patients. There was no any statistical significance in terms of the initial symptoms of the disease. Hypertension and cardiac failure were frequent in BMI $>$ 25 group (respectively  $p=0.003$ ,  $p=0.015$ ). There was no significant difference in length of stay in the hospital and ICU between the groups. CRP was high in the BMI $>$ 25 group but it was not statistically significant ( $p=0.069$ ). There are also no statistical significance in terms of hydroxychloroquine, low molecular weight heparin, steroids, antibiotics, Favipiravir usage between the two groups ( $p>0.05$ ).

In this study, only WBC and neutrophile values were found higher in obese/overweight patients. Hypertension and cardiac failure were statistically significant comorbidities in patients with a BMI $>$ 25 Kg/m<sup>2</sup>. There is no statistically significant difference was found between the two groups in terms of the other parameters.

**Keywords:** COVID-19, obesity, body mass index, ICU, laboratory parameters.

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## Exosome-based Approaches in Designing Pre-screening Devices in Malignant Pathologies

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### Abstract

Malignant pathologies have been the major cause of death in the world. Early diagnosis and effective therapy are essential for prolonging the survival of patients suffering from life-threatening diseases. However, a notable problem in diagnosis is the lack of biomarkers that are specific, highly stable, and noninvasive or minimally invasive. Proteins, nucleic acids, glycoconjugates transported into body fluids could reflect the pathophysiological states of their parental cells. Furthermore, exosomal contents can also serve as promising biomarkers for early diagnosis by general or proprietary detection techniques.

Emerging technologies promise to detect malignancies at an early stage. Additionally, the idea of applying a simple blood test in order to distinguish early malignant changes is extremely appealing.

Exosomes secreted by all living cells are nanovesicles which play a vital role in paracrine and autocrine cell communication. Exosomes contain biomolecules such as proteins, lipids, miRNAs, etc. which represent the contents and cellular state of cells. The stable, trackable, active, and real-time biological properties are the key factors to make exosomes the next generation of “STAR” in diagnosis. On the other hand, malignant cells are known to secrete more exosomes than normal cells, along with various disease-specific biomarkers. For instance, CD44, CD47 and CD24, PCA3 and TMPRSS2, and microRNA-532 for, but not limited to, breast cancer, prostate cancer, and acute myeloid leukemia, respectively, have been identified as potential exosomal biomarkers for early detection. Thus, exosomes are ideal candidates in striving to generate unique biomarker signatures that can identify pathological cellular status. Therefore, the detection and characterization of the expression of disease-specific exosomes can be an invaluable tool in the early detection of cancer.

In this study, we review the exosome markers which can be used as an indispensable component of pre-screening devices in malignant pathologies.

**Keywords:** Biomarkers, devices, diagnosis, exosomes, malignancies, pre-screening

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## Studies on VR and AR Applications in Anatomy Education in 2021

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### Abstract

Computer-based learning has been adopted to facilitate medical education, especially anatomical learning. Rapid advances in technology over the past decade have significantly affected the way medicine and health sciences are taught and learned. Specifically, the introduction of user-level virtual reality (VR) and augmented reality (AR) technologies has led to the creation of innovative learning tools in fostering hands-on learning experiences. Our aim in this review; The aim of this study is to examine the articles published in 2021, investigating the effects of AR and VR, which have gained popularity recently, on anatomy education. Google Scholar academic database was used in the research. In 2021, research articles on AR and VR applications used in anatomy education were scanned. The search engine was searched with the words "anatomy education and AR" and "anatomy education and VR". In this context, 11 full-text articles related to VR and AR applications used in anatomy education were reached in 2021 as a result of searches in the Google scholar database by using keywords. Of these studies, 8 (72%) were VR and 3 (27%) were related to AR. Among the studies, 6 (54%) pretest-posttest, 2 (18%) questionnaire, 2 (18%) test, and 1 study only student experiences. 6 of the studies are from control and experimental groups, 2 of them are VR experience only, 1 of them is HoloLens and AR, 1 of them is VR and radiological study, and 1 of them is from anatomy and physiology department students. All of the participants included in the studies consisted of medical faculty students, the maximum number of participation was 122 and the minimum number of participation was 12. In all the studies included in the research, it was observed that the academic success rates of the students increased. In the studies conducted in 2021, it was seen that the importance of AR and VR in anatomy education was increasing and it was effective on student motivation.

**Keywords:** Anatomy Education, Virtual Reality (VR), Augmented Reality (AR).

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## Hiv Case Diagnosed After Staff Injury

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### Abstract

Healthcare workers are at risk of being infected with blood-borne diseases as a result of occupational contact. Needle-stick and sharp injuries pose a significant health risk, especially in terms of blood-borne infections. Today, the number of cases infected with human immunodeficiency virus (HIV) is increasing. In this article, an unusual case of a patient who could not be diagnosed in routine processes, after his nurse was injured by a needlestick-sharp object, was diagnosed with HIV and had the opportunity for early treatment, will be presented.

A 45-year-old male patient was admitted to the Internal Medicine ward with complaints of fever, malaise, abdominal pain and weight loss for a week. Pancytopenia (wbc: 3.29, HB:9.72, plt:78.000), CRP:32.5mg/L, Sedim:66/h were found in the examinations performed during the five-day hospitalization period. In Lung CT, it was reported as "Multiple lymph nodes in the mediastinum, lymph nodes in both axillary pathological dimensions, lung pathology was not observed". There was no growth in blood and urine cultures. It was learned that during the hospitalization period, an Infectious Diseases consultation was not requested. Bone marrow biopsy was performed with the preliminary diagnosis of lymphoma, and the patient, who had no fever and could not be diagnosed in the follow-ups, was discharged to be followed up as an outpatient. During the discharge process, when the patient wanted to be given an antibiotic injection at the last moment, and under the pressure of the patient's relatives, the nurse was stressedly injecting and trying to close the cap, and a needle was stuck in her hand. Afterwards, our infection control nurse was informed according to the "Personnel Injury Procedure" routinely applied in our hospital. After informing the infectious diseases specialist, prophylactic antiretroviral treatment was quickly planned for our employee, and after the patient's Western blot confirmation test results were positive, he was referred to the Infectious Diseases clinic, which monitors HIV for treatment and follow-up. Anti-HIV test was found to be negative in our employee's one-month and 12-month control examinations. In addition to the protection of personnel working in health services from blood-borne diseases, what to do after injury are issues that must be known. After medical intervention, a risk assessment of the source and the exposed worker should be made and a follow-up/treatment program should be established. In addition, acute HIV infection should be considered in the etiology of fever. HIV infection can be easily missed if diagnostic tests are not made. In this patient, no diagnosis could be made in routine examinations, and thanks to the effective quality processes following the nurse's needle-stick and sharp injury, HIV transmission was prevented by early treatment to the healthcare worker, and the patient whose etiology could not be determined had the opportunity to be diagnosed with HIV and his treatment was planned.

**Keywords:** Staff Injury procedure, HIV infection, Late diagnosis

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## Scapula Anatomy and Its Morphometric Evaluation

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Emir İbrahim IŞIK<sup>2</sup>  
Pınar GÖKER<sup>3</sup>

### Abstract

The scapula has a complex anatomical structure due to its unique irregular shape. In our study, it was aimed to evaluate the scapula anatomically and to make comparisons between the right and left scapula by taking morphometric measurements.

In our study, 50 (25 right and 25 left) dry bone scapulae of unknown age and gender were measured in Çukurova University Anatomy laboratory. In the measurements made on the scapula, the measurements were made using the camera and the measurements were recorded using the Image J program. In addition, the values found were recorded as milimeter and statistical analysis was performed using the SPSS 21.0 pocket software.

As a result of the data obtained, the measurement parameters and averages of 50 scapula are as follows. The right and left lengths of the scapula differed statistically between  $14.25 \pm 1.20$  mm, and  $13.00 \pm 1.00$  mm, ( $p < 0.05$ ). Scapula right and left width did not differ statistically between  $9.76 \pm 0.81$  mm, and  $9.75 \pm 0.50$  mm, ( $p > 0.05$ ). Scapular index showed a statistically significant difference between right and left  $68.49 \pm 3.50$  mm, and  $75.00 \pm 2.75$  mm, ( $p < 0.05$ ). Cavitas glenoidalis right and left lengths differed statistically between  $3.50 \pm 0.28$  mm, and  $3.57 \pm 0.24$  mm, ( $p < 0.05$ ). Cavitas glenoidalis width showed statistically significant difference between right and left  $2.38 \pm 0.20$  and  $2.44 \pm 0.25$  mm, ( $p < 0.05$ ).

We think that knowing the anatomy of the scapula and its morphometric values will help in the field of forensic medicine in determining the differences due to variations, in surgical operations related to the scapula and in various pathologies related to the scapula.

**Keywords:** Scapula, scapula anatomy, morphometri measure

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## Use of Technological Modalities in Teaching Human Anatomy: A Literature Review From 2020 to 2022.

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### Abstract

Technology stands out as a means of advancement in the fields of health and education. During health education, human anatomy lessons are traditionally carried out with theoretical methods, model applications and cadaver examinations. In addition, technological methodologies support teaching methods by making them interactive. During the Covid-19 pandemic period, technological methods were frequently used in the application of distance education. Therefore, the aim of our study is to examine the approaches to the use of technological methods in teaching human anatomy. For this study, a literature search covering randomized controlled trials published between January 2020 and December 2022 was conducted using the keywords "anatomy" and "medical education" in the PubMed electronic database. Inclusion criterias; Studies written in English are studies in the field of health education and studies evaluating the use of technological methods in teaching human anatomy. Exclusion criterias; Studies written in a language other than English are studies involving a particular surgical technique and animal studies. A total of 1456 studies were accessed, and 7 studies were included in this review according to the inclusion/exclusion criteria. As a result, methods such as virtual reality (VR), augmented reality (AR), mixed reality (MR), web-based education, holographic modeling and three-dimensional printed modalities (3DP) provide benefits in students' anatomical learning processes.

**Keywords:** Anatomy, anatomy education, health education, technology, educational technologies

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## Preventing Liver Toxicity Induced by Methotrexate

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### Abstract

Methotrexate is from the group of antimetabolites which is an antineoplastic drug group. Its successful use in other tumors in adults was soon followed by children. Side effects that occur during methotrexate therapy are quite common. Side effects such as nausea, vomiting, increased transaminases and stomatitis are often dose related. The clinical use of methotrexate is significantly limited due to the associated various organ toxicities, including kidney, liver, lung, bone marrow, and gastrointestinal toxicities. Methotrexate causes side effects especially hepatotoxicity. Approximately 30% of the patients who receive methotrexate treatment are discontinued due to drug toxicity. For this reason, it comes to the conclusion that it should be used together with some agents to avoid methotrexate toxicity. Therefore, with this study, we aimed to collect studies in the literature to prevent hepatotoxicity caused by methotrexate. For this purpose, we examined that melatonin, nicotinamide, methionine, vitamin E, vitamin C, n-acetylcysteine, alfa linoleic acid, coconut, folic acid, antioxidant agents, anti-inflammatories and vasodilator agents have been used to protect tissues from liver toxicity of methotrexate as a result of the literature review.

**Keywords:** hepatotoxicity, liver, methotrexate, side affect, toxicity.

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## Choroidal Vascularity Index Findings in Patients Recovered from COVID-19 Pneumonia

Enes KESİM<sup>1</sup>

### Abstract

The aim of this study was to investigate choroidal vascular changes in the subfoveal area by enhanced depth imaging optical coherence tomography (EDI-OCT) in patients after SARS-CoV-2 pneumonia (mild course).

Retrospective, observational, cross-sectional study.

Materials and Methods: Forty three eyes of 43 patients post-SARS-CoV-2 infection with pneumonia (mild course) (Group 1) and 43 healthy controls (Group 2) were enrolled in this study. COVID-19 patients who completely recovered from COVID-19 pneumonia were included in the study and were evaluated 6 months after get rid of pneumonia. The measurements were obtained from EDI-OCT studies of the following choroidal structures: total choroidal area (TCA), luminal area (LA), stroma area (SA), choroidal vascularity index (CVI) and subfoveal choroidal thickness (SFCT) compared to healthy controls. The main outcome measure was CVI, described as the ratio of LA to TCA.

The mean age was  $49.7 \pm 12.6$  years old. The mean TCA, SA and LA were found to be significantly higher in patients with completely recovered from Group 1 than Group 2 ( $2.48 \pm 0.42$  vs.  $1.89 \pm 0.33$  mm<sup>2</sup>,  $p < 0.001$ ;  $0.85 \pm 0.15$  vs.  $0.62 \pm 0.11$  mm<sup>2</sup>,  $p < 0.001$ ; and  $1.63 \pm 0.30$  vs.  $1.24 \pm 0.21$  mm<sup>2</sup>,  $p < 0.001$ , respectively). Unlike, CVI did not significantly differ between the two groups ( $64.67 \pm 3.19$  (Group 1),  $66.59 \pm 3.06$  (Group 2)) ( $p = 0.080$ ).

CVI may demonstrate choroidal vascular physiology in patients completely recovered from COVID-19 pneumonia. These findings might be the outcome of thrombotic microangiopathy, which can damage choroidal structures like as other systemic organs. Choroidal vascular changes assessed via EDI-OCT can be used as a non-invasive biomarker of early vascular dysfunction after SARS-CoV-2 infection.

**Keywords:** COVID-19, Choroidal Vascularity Index, CVI

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## Efficacy of Topical Dexamethasone Eye Drops in Preventing Ocular Inflammation and Cystoid Macular Edema Following Uncomplicated Cataract Surgery with or Without Injection of Single Dose Perioperative Subtenon Triamcinolone Acetonide

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Bugra KARASU<sup>2</sup>

Ali Rıza Cenk ÇELEBİ<sup>3</sup>

### Abstract

To evaluate the efficacy and safety of topical dexamethasone (DEX) eye drops in combination with a single perioperative subtenon triamcinolone acetonide (sTA) injection versus conventional topical DEX eye drops in the prevention of ocular inflammation and cystoid macular edema following cataract surgery.

Medical records of 245 eyes of 245 patients who underwent uncomplicated cataract surgery were analyzed in this retrospective controlled clinical study. Topical DEX eye drops were administered to 128 eyes routinely post-operatively, and 117 eyes were given a single dose of sTA (40 mg/ml) together with topical DEX eye drops for postoperative care. Postoperative topical antibiotic prophylaxis was applied to all eyes. The primary outcomes were anterior chamber (AC) cells and flare, central macular thickness (CMT), best corrected visual acuity (BCVA), and intraocular pressure (IOP) measurements on day 7, day 30, day 90 and day 180 following surgery.

Although CMT increased in the DEX group, no increment was observed in the DEX + sTA treated group for all follow up periods (on day 7 ( $+1.3 \pm 18.6$  and  $-8.7 \pm 21.9 \mu\text{m}$ ,  $p = 0.038$ ), on day 30 ( $+20.5 \pm 58.4$  and  $-4.1 \pm 25.2 \mu\text{m}$ ,  $p = 0.009$ ), on day 90 ( $+7.2 \pm 19.9$  and  $-5.7 \pm 30.6 \mu\text{m}$ ,  $p = 0.029$ ) and on day 180 ( $+8.2 \pm 22.6$  and  $-6.4 \pm 32.9 \mu\text{m}$ ,  $p = 0.032$ )). There was no significant difference in terms of AC cells and flare between the two groups during the entire follow-up period ( $p > 0.05$ ). Significant improvement in BCVA was observed in the DEX + sTA group at day 30 ( $p = 0.008$ ). IOP differences were comparable, and both groups had high ocular tolerance. There were no severe adverse effects recorded.

Topical DEX eye drops in combination with a single dose perioperative injection of sTA have robust efficacy in preventing ocular inflammation and the development of cystoid macular edema following uncomplicated cataract surgery.

**Keywords:** Pseudophakic cystoid macular edema, uncomplicated cataract surgery, subtenon triamcinolone acetonide, topical dexamethasone eye drops, ocular inflammation.

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## Non-Arteritic Anterior Ischemic Optic Neuropathy Developing after COVID-19 mRNA Vaccine

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### Abstract

The COVID-19 virus, which emerged in China in 2019, is affecting the entire world, and mankind has mobilized all its means for such a mortal virus. Vaccination, which is the most effective way, is among them. One of the most widely used vaccine types in the world is the BioNTech mRNA COVID-19 vaccine. We report the case of a 53 year old female who presented non-arteritic anterior ischemic optic neuropathy developing after COVID-19 mRNA vaccine.

A 53-year-old female patient was admitted to our clinic with sudden vision loss in the left eye. The patient suddenly noticed a narrowing in the lower-left visual field three days after the second dose of the BioNTech mRNA COVID-19 vaccine. The patient's vision was at hand movement level on the left. Optic disc was swollen and edematous in the left fundus. She received pulse steroid therapy at 1 g a day for three days. The steroid treatment was continued orally for 14 days and was terminated by lowering the dose.

COVID-19 vaccinations, which are administered all over the world, naturally increase the incidence of side effects. This case will contribute to the literature because it is the first case that developed NAAION following the COVID-19 mRNA vaccine (BioNTech, Pfizer).

**Keywords:** Anterior, Ischemic, Optic neuropathy, COVID-19, Vaccine

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## Evaluation of Anterior Segment Parameters in Eyes with Pseudoexfoliation Syndrome and Senile Cataract

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*Hasan AKGÖZ<sup>2</sup>*

### Abstract

To compare anterior segment parameters in eyes with pseudoexfoliation (PEX) syndrome, PEX glaucoma and non-PEX cataracts.

177 eyes of 177 patients were included in this retrospective, comparative study. The patients were divided into three groups as PEX syndrome group (n=31), PEX glaucoma group (n=72) and control group (n=74). Best-corrected visual acuity (BCVA), anterior segment examination with slit lamp, intraocular pressure (IOP) measurement with non-contact tonometry, and fundus examination were performed in all patients. In addition, optical biometry measurements of axial length (AL), central corneal thickness (CCT), aqueous depth (AD), anterior chamber depth (ACD), lens thickness (LK) and mean keratometer (K) values were obtained and compared between groups.

In the PEX glaucoma group, MKK  $529 \pm 25.64 \mu\text{m}$ , W  $43.78 \pm 1.55$  diopter, ACD  $3.10 \pm 0.41$  mm, AD  $2.55 \pm 0.41$  mm, LK  $4.46 \pm 0.39$  mm, AL was found to be  $23.35 \pm 0.88$  mm. In the PEX syndrome group, MKK was  $538 \pm 37.43 \mu\text{m}$ , F  $43.80 \pm 1.55$  diopters, ACD  $3.10 \pm 0.42$  mm, AD  $2.57 \pm 0.41$  mm, LK  $4.42 \pm 0.43$  mm, AL was found to be  $23.43 \pm 0.85$  mm. In the control group, MKK  $535 \pm 31.01 \mu\text{m}$ , W  $43.81 \pm 1.53$  diopter, ACD  $3.15 \pm 0.40$  mm, AD  $2.61 \pm 0.39$  mm LK  $4.39 \pm 0.47$  mm, AL It was found to be  $23.27 \pm 0.97$  mm. There was no statistically significant difference between the groups in any of the anterior segment parameters (ANOVA  $p > 0.05$ ). The percentage of eyes with ACD  $< 2.5$  mm was 6.5% in PEX eyes with glaucoma, 5.6% in eyes with PEX syndrome and 2.7% in eyes in the control group, there was no statistically significant difference ( $p > 0.05$ ). In our study, no statistically significant difference was found between the groups in terms of anterior segment parameters and PEX. There are also some studies in the literature that show different results, especially regarding CRA and ACD parameters. These different results; may be related to differences in age, race, method and sample size.

**Keywords:** pseudoexfoliation, glaucoma, cataract, anterior segment

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## Clinical Significance of Procalcitonin Elevation in Patients with Solid Tumors with Elevated Crp

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*Ayşegül SEREMET KESKİN<sup>3</sup>*

### Abstract

Although high levels of Procalcitonin (PCT) and C-Reactive Protein (CRP) in cancer patients require to exclusion the infection, it may also be associated with cancer type and clinical grade. These two parameters, which are primarily used for diagnosis and severity of infection, can increase in various cancer types and show prognosis. In this study, we aimed to show that elevation of CRP and PCT in solid cancer patients may not always indicate infection and its relationship with different types of cancer.

Between January 2018 and December 2022, patients with lung, breast and prostate cancer were scanned. Among these population, the patients who tested for CRP and PCT level, were evaluated retrospectively. 107 patients whose CRP level >100 mg/dl were included in the study. The relationship between each cancer group and procalcitonin level, was examined. Results: Twenty-three of the patients had prostate cancer, 36 had breast cancer, and 48 had lung cancer. The mean PCT level of 19 patients without active infection, was 0.63 ng/ml. An important result was that the mean PCT level of 8 prostate cancer patients who received chemotherapy and had multiple bone or visceral metastases, with a more aggressive feature and no infection clinic, was found to be 1.4 ng/ml. While the mean PCT was 0.41 ng/ml in breast cancer without any clinical signs of infection, the mean PCT level of 17 patients without infection in the HER 2 positive subgroup was 0.85 ng/ml (over the mean PCT), and the mean PCT level of 4 patients in this group had inflammatory breast cancer, was 1.1 ng/ml. The mean PCT level of 28 lung cancer patients with metastatic and non-small cell adenocarcinoma and without infection, was 1.33 ng/ml and it was higher than other lung cancer types.

In solid cancer patients with CRP level >100 mg/dl; If there is prostate cancer with high tumor burden, HER2 positive metastatic breast cancer and metastatic lung adenocarcinoma, PCT level can elevate without infection. In addition, the PCT level may increase in accordance with tumor stage and severity.

**Keywords:** Oncology, CRP, procalcitonin, solid cancer

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# International Congress of Medical and Health Sciences Studies

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## Current Situation and Side Effects in Covid-19 Vaccines

*Harva Tünay<sup>1</sup>*

### Abstract

In SARS-CoV-2 vaccine studies, it was determined that the antibody response, which was stronger in young people and women, decreased gradually 6 months after the second dose, and it was recommended that a reminder dose should be given. It was determined that the antibody response, which increased with the third dose, decreased again after the 10th week. A 4th dose vaccination is recommended for risk groups, especially for healthcare workers. In Israel, on June 2, 2022, the 4th dose was started to be administered to healthcare workers and people over 60 years of age, and it was determined that the rate of severe infection decreased by 4.3 times compared to those who received 3 doses of vaccine. In another study, it was found that the maximum immune response after the 3rd dose and the humoral response to the 4th dose were suppressed. The presence of atypical memory B cells induced by repeated antigen exposure at all times has been implicated as the cause. Therefore, it was concluded that increasing vaccinations may not increase immunity. Heterologous vaccination is recommended because more antibodies and CD4 and CD8 T-cell responses are obtained. Pain, redness, swelling, itching, axillary lymph node enlargement, fever, fatigue, joint pain and headache are the most common side effects. Anaphylaxis after mRNA vaccines is very rare. Myocarditis/pericarditis, which can develop at a rate of 40.6 per million in young men, responds to mild and conservative treatment. Thrombosis associated with thrombocytopenia and Guillain-Barré syndrome have been reported in those vaccinated with Johnson & Johnson, Astra-Zeneca vaccines. More research is needed to say whether it's related to vaccines or just a coincidence. Vaccines protect against serious illness and death from COVID-19, as well as long-term complications from COVID-19. Because of the rare occurrence of side effects and the potentially devastating impact of COVID-19, the benefits of vaccines outweigh the risks. WHO recommends that these vaccines continue to be used to protect priority groups.

**Keywords:** Vaccine, Covid-19, SARS-CoV-2

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## The Use of Minimally Invasive Surgical Techniques in Pediatric Cardiac Patients: 4-Year Experience of a Single Center

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*Başak SORAN TURKCAN<sup>2</sup>*

*Atakan ATALAY<sup>3</sup>*

### Abstract

Minimally invasive surgical procedures have gained popularity in pediatric cardiovascular surgery in recent years. These procedures yield better cosmetic results than standard approaches and provide similar low mortality and morbidity as in the standard sternotomy approach. Our aim in this study is to retrospectively examine the minimally invasive surgical procedures performed in our clinic over a 4-year period and to compare the postoperative data of the patients with the current literature. All patients who were operated with minimally invasive techniques between 2019-2022 were included in the study. The preoperative demographic data and diagnoses of the patients, the use of postoperative blood products, the need for analgesia, the duration of intensive care and hospitalization, and the complications experienced during these processes were analyzed retrospectively. The obtained data were compared with the data in the existing literature. Between April 2019 and October 2022, 112 patients were operated with minimally invasive surgical techniques in our clinic. The most commonly used technique among these techniques is right infraaxillary vertical mini-thoracotomy with 75 patients. Apart from this, ministernotomy was performed in 22 patients and right submammary incision in 15 patients. Secundum atrial septal defect (ASD) was the most prevalent diagnosis with 98 patients. Perimembranous ventricular septal defect was performed in 2 patients, partial pulmonary venous return and ASD coexistence in 9 patients, primum ASD and mitral cleft in 2 patients, and subaortic membrane resection in 1 patient. No mortality was observed in this cohort. Except for 2 patients, all patients were extubated between 4-6 hours postoperatively and transferred to the ward on the 1st postoperative day. Minimally invasive techniques continue to gain popularity in pediatric cardiac surgery thanks to the cosmetic advantages they provide. These procedures can be performed safely in patients with appropriate diagnosis and provide low mortality and morbidity.

**Keywords:** Minimal Invasive , Pediatric, Cardiac

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## Neurological Changes During Open Cardiac Surgery: Neuromonitoring

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Özcan ERDEMLİ<sup>6</sup>

### Abstract

**Introduction:** Vital organs, especially the central nervous system, can be adversely affected during cardiopulmonary bypass (CPB). Neuromonitoring is important in prevention of the complications. We evaluated the relationship between different neuromonitoring techniques (NMT) and investigated their comparable values at specific stages of open coronary bypass graft surgery (CABG)[1,2].

**Methods:** After the hospital ethical committee approval of this prospective study we included 22 patients with age of 30-65 year and ASA I-II that will undergo elective CABG on CPB. In addition to routine cardiac monitoring, two-channel electroencephalography (EEG) was recorded to assess changes in cerebral cortical synaptic activity and the depth of anesthesia was measured by Bispectral Index (BIS) monitoring. Cerebral blood flow velocity measurement was done by transcranial doppler (TCD) evaluation of middle cerebral artery while EEG and BIS were recorded at ten different periods of surgery. Timing was: before induction of anesthesia(I); before surgical incision (II); after sternotomy (III); during left internal mammary artery dissection (IV); on CPB at 34°C (V), 33°C (VI), 32°C (VII) respectively; on warming to 33°C (VIII); during partial CPB (IX); at the end of surgery (X). The measurements on these ten periods were compared statistically with repeated measures ANOVA and post hoc test.

**Results:** EEG and BIS measurements were similar at all stages of surgery ( $p>0.05$ ). The EEG, BIS and TCD data showed similar changes at eight stages of surgery ( $p>0.05$ ) but not at the start of perfusion (time V) and during partial CPB before terminating bypass (time IX) ( $p<0.05$ ). The data from EEG and BIS measurements showed different alterations in cooling period and in period of starting CPB. The TCD data reflected cerebral flow changes but EEG and BIS data failed to reflect this alterations particularly in transition periods of the surgery. All neuromonitoring measurement values restored to initial values and indicated no difference between NMT after CABG. No neurologic deficit was observed in any patient postoperatively.

**Discussion:** Because of the variances in the measurements of TCD, EEG and BIS in the transition periods of starting and ending perfusion, we thought that EEG and BIS were insufficient to display the cerebral blood flow alterations and neurological statuses of the patients at this critical periods of open cardiac surgery.

**Keywords:** EEG, BIS, TCD, nöromonitörizasyon, CABG.

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## Could Liver Fibrosis Parameters be a Predictor for Acute Renal Injury After Cardiopulmonary Bypass?

Mesut Engin<sup>1</sup>

Orhan Güvenç<sup>2</sup>

### Abstract

Cardiac surgery operations performed with cardiopulmonary bypass (CPB) are of vital importance in the treatment of many cardiac diseases. Acute renal failure (ARF) after these operations is an important problem. In this current study, we aimed to investigate the role of non-invasive liver fibrosis parameters calculated in the preoperative period in predicting the risk of ARF.

Patients who underwent cardiac surgery with CPB in our clinic between January 2022 and June 2022 were included in this study retrospectively. Patients who developed ARF in the postoperative period were recorded as Group 2, and patients who did not develop as Group 1. Postoperative ARF diagnosis was performed according to the Kidney Disease Improving Global Outcomes (KDIGO) classification. Any of these classification stages development in the postoperative period were registered as renal failure. The FIB-4 score and the aspartate aminotransferase to platelet ratio index (APRI) were calculated from preoperative features.

A total of 228 patients were included in the study. Postoperative ARF occurred in 45 (19.7%) patients (Group 2). The median age of the 183 patients included in Group 1 and 45 patients in Group 2 was 58 (44 to 81) and 69 (41 to 82) years, respectively ( $P<0.001$ ). The two groups were similar in terms of current smoking rates, body mass index, gender, and left ventricular ejection fraction rates. In Group 2, FIB-4 and APRI values were significantly higher ( $P<0.001$ ). In multivariate logistic regression analysis, hypertension [Odds ratio (OR): 1.440, 95% confidence interval (CI): 1.110-2.690,  $P=0.033$ ], FIB-4 score (OR: 0.860, 95% CI: 0.496-0.986,  $P=0.012$ ), APRI (OR: 1.329, 95% CI: 1.090-1.968,  $P=0.006$ ) and preoperative high creatinine (OR: 4.154, 95% CI: 2.106-6.447,  $P<0.001$ ) were found as independent predictors of ARF.

Acute renal failure that may occur after cardiac surgical operations is an important problem. FIB-4 score and APRI values, which can be easily obtained from the preoperative characteristics of the patients, can be used to predict the risk of postoperative ARF.

**Keywords:** Cardiopulmonary bypass, acute kidney injury, liver fibrosis

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## Investigation of Growth Differentiation Factor-15 (Gdf-15), Paraoxonase and Arylesterase Levels in the Pericardial Fluid of Patients Undergoing Cardiac Surgery

*Mehmet Burak COŞKUN<sup>1</sup>*

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### Abstract

Concentrations of certain substances in the pericardial fluid contribute to the understanding of many pathophysiological mechanisms related to cardiovascular diseases, according to many studies. Though the basic role of Growth Differentiation Factor 15 (GDF-15), a member of the family of transforming growth factor beta (TGF- $\beta$ ), is unknown, it is thought to be taking place in regulation of many different physiological events such as growth inhibition, apoptosis induction, cell differentiation and tumor invasion. GDF-15 normally has a low amount in cardiac tissue under physiological conditions. But as an answer to reactive oxygen radicals, proinflammatory cytokines, ischemia and mechanical events it may show a significant increase. The aim of this study was to determine the levels of GDF-15, Paraoxonase and Arylesterase in pericardial fluid in cardiovascular diseases, and also it was aimed to understand the relationship between these parameters and the pathophysiology of the disease. GDF 15, Paraoxonase, Arylesterase, Total Oxidant Status, Total Antioxidant Status and Oxidative Stress Index were studied in the pericardial fluid of 40 patients (28 M + 12 F). A positive correlation was seen between GDF-15 and Paraoxonase, but it wasn't statistically significant ( $p > 0.05$ ). A negative correlation was seen between GDF-15 and arylesterase and OSI, but wasn't statistically significant ( $p > 0.05$ ). The negative correlation between Paraoxonase and OSI value wasn't statistically significant ( $p > 0.05$ ). The positive correlation between arylesterase and OSI wasn't statistically significant too ( $p > 0.05$ ). Since the study is the first study on subject, we don't have a standard methodology and the lack of access to a sufficient number of cases, the sensitivity of the pericardial fluid which is affected by environmental factors, and the lack of a control groups created disadvantages. For this reason studies about parameters in pericardial fluid has to have larger series, has to be IV multicentered, prospective, controlled and standard methodology should be used.

**Keywords:** Pericardial fluid, Heart Lung Machine, GDF-15, Paraoxanase, Arylesterase, OSI.

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## Spontaneous Intracranial Hemorrhage in a Patient with Acute Leukosis

Levent ŞAHİN<sup>1</sup>

### Abstract

Hyperleukocytosis is one of the oncological emergencies that cause serious mortality. Leukostasis, known as abnormal leukocytes forming intravascular stasis, is the most serious complication. It occurs with too many blasts in acute leukemia patients, called hyperleukocytosis. In these cases, we can sometimes see the most mortal complications. In some patients with acute leukemia, fatal complications may occur in the early period before they are diagnosed. The most common causes of this early mortality are bleeding and leukostasis. Aggregates and thrombi formed due to the increased number of blasts can cause bleeding by disrupting pulmonary and cerebral blood flow.

In this case, we discussed a 39-year-old male patient who had convulsions shortly after coming to the emergency department with complaints of headache and dizziness. On examination, the pupils were anisocoric and had urine leaking underneath. In the blood analysis, hemogram and platelet levels were low. There was no blood disease in the patient's history. He was intubated when his conscious state deteriorated and it was determined that there was diffuse cerebral hemorrhage in the computerized tomography of the brain. Cortisone, mannitol, fluid support, fresh frozen plasma, erythrocyte suspension treatments were started in the emergency room. The patient, who had no chance of surgery, died on the third day of his stay in the intensive care unit after follow-up and treatment.

Although it is rarely seen in emergency services, the possibility of acute leukemia, which can cause spontaneous cerebral hemorrhage with a very high mortality, should be kept in mind. It is vital to know this differential diagnosis, especially in young patients with sudden onset coagulopathy.

**Keywords:** Acute leukostasis, intracranial hemorrhage, mortal

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## Investigation of Serum Advanced Glycation End-Products Receptor (Rage) Levels in an Experimentally Established Model of Blunt Thoracic Trauma in Rabbits

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### Abstract

The aim of this study is to investigate the diagnostic value of the Serum Advanced Glycation End-Products Receptor (Rage) biomarker in the light of literature, to determine histopathological the damage in the lungs caused by low, medium and high-energy thoracic trauma in rabbits with an experimental bilateral blunt thoracic trauma model and to predict graded acute lung injury.

A total of 27 New Zealand type rabbits aged 1-2 years were used in our study. A modified bilateral blunt thoracic trauma model was used to produce different levels of lung contusion in rabbits. We divided the rabbits into 4 groups as control(n=6), low (n=7), medium(n=7), high(n=7). Blood samples were taken from the control and trauma groups to evaluate the RAGE levels at 0, 12 and 24 hours. TUNEL kit was used for histopathological examination. Two-way Spearman's correlation analysis, Friedman test, Kruskal Wallis-H test, Mann Whitney-U test, which are non-parametric tests, were used as statistical methods.

In our study, with reference to the control group, the degree of contusion was found to be diagnostically significant for the traumatized rabbits. In our study, serum RAGE levels were found to be significantly higher in the low-energy trauma group, with a mean of 12th hour RAGE (pg/ml) ( $968.43 \pm 238.01$ ) ( $p=0.004$ ). The 24th hour RAGE level (pg/ml) was found to be diagnostically significant in all energy groups. No correlation was observed between the energy level and the RAGE level.

As a result of these experimental data, RAGE may be a biochemical marker in acute lung injury caused by traumatic thoracic injury. It is difficult to give a definite result according to this study, which was carried out with a small group of experimental rabbits. Experimental and clinical studies with larger patient groups or rabbits on this subject will be useful.

**Keywords:** Blunt thoracic trauma, experimental study, RAGE, lung histopathology, TUNEL

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## Anaphylactic Shock After Esomeprazole Use and Emergency Management

*Mubittin SERKAN YILMAZ*

**Abstract**

**Keywords:**



## Diagnosticate of the Brain Death

*Esengül GÖK<sup>1</sup>*

### Abstract

Brain death; is the loss of all functions of the brain, brainstem and cerebellum, irreversibly. The first definition was made at Harvard University in 1968 and the criteria determined are still used today, with minor differences. Since 1981, brain death has been accepted as equivalent to the death of a person. Diagnosis of brain death is becoming increasingly important due to the increasing number of patients awaiting organ transplantation. Brain death is diagnosticate by a neurological examination and an apnea test. In order to carry out these examinations and tests, necessary preconditions must be met and metabolic and organic causes that may cause the same clinical picture must be excluded. With the neurological examination, the coma state is evaluated and a response to the stimuli is sought, tests are performed to detect brainstem and cranial nerve reflexes. With the apnea test, it is checked whether there is a spontaneous respiratory response to apnea. If all tests support brain death, the neurological examination is repeated by waiting for periods that vary according to age, and if no change is detected, brain death is declared. In cases where neurological examination or apnea test is not possible or is limited, electroencephalography (EEG), transcranial doppler ultrasonography, CT angiography, Supportive tests such as MR angiography and perfusion scintigraphy can be applied. Although there are countries that find clinical tests sufficient for diagnosis, supportive tests are required in some countries due to ethical and religious beliefs. In this study, besides the clinical examination, by summarizing the supporting tests, It is aimed to initiate the brain death diagnosis process and to contribute to the establishment of a diagnosis as soon as possible.

**Keywords:** Brain death ,Apnea Test, EEG, Serebral Anjiography, scintigraphy

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## Seizure Activity of Sevoflurane in A Patient without Epilepsy

*Eylem YAŞAR*

Abstract

Keywords:





## Blood Usage, Complication and Disposal Rate in Cardiovascular Surgery Intensive Care

*Bedih BALKAN<sup>1</sup>*

### Abstract

Intensive care patients also constitute a patient group in which blood and blood products are used a lot, 45% of the patients treated in the intensive care unit definitely use 1 or more units of blood or blood products (1). Rational and effective use of blood products is one of the basic subjects of blood banking and transfusion medicine. For this reason, blood components taken from the donor should be protected as much as possible and their destruction should be prevented except for medical reasons. In this study, the blood products used in the Cardiovascular Surgery Intensive Care Unit of Mehmet Akif Ersoy G.K.D.C Hospital, one of the largest Cardiac centers in our country, between January 1- December 31, 2021; usage rates, destruction rates and complications were examined.

The blood unit of our hospital is a Transfusion Center and the need for blood components is provided by the Turkish Red Crescent Istanbul European Side Regional Blood Center. The blood requirements of 4982 patients who had cardiopulmonary operation in our hospital in 2021 and were followed up in the intensive care unit were analyzed retrospectively. A total of 4853 pieces of red blood cell suspension were used, Platelet suspension apheresis:159, Pooled platelets:401, Fresh frozen plasma:4229, Whole blood:6 units, Cryoprecipitate:578 total: 10220 units of blood product. Reported complication 2 erythrocyte mild reactions 2 mild FFP reactions have been reported. 4 FFP, 6 Erythrocyte, 4 Whole Blood, 9 Cryoprecipitate were destroyed, a total of 23 blood products were destroyed, the destruction rate is 0.22%. The products used and their destruction rates are given in

we believe that the evaluation of these data is very important in the management of hospital blood product use. By increasing the training activities for all healthcare professionals by the training unit and the hemovigilance nurse, applied trainings were increased at the bedside, in the field and in the blood center unit. In order to reduce the use and disposal of blood and blood products, conferences were held to raise awareness by inviting relevant faculty members from medical faculties. Since all clinics in our hospital are regularly trained on the use and importance of blood products, the rate of destruction is very low. The reason for the low complication rate may be hidden because most of them are intubated and cardiac patients.

**Keywords:** Blood product, destruction rate, complication

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## Neonatal Ovarian Cysts: 10 Years of Experience in A Single Center

*Mehmet Uysal<sup>1</sup>*

### Abstract

This research aims to assess the documents of patients diagnosed with neonatal ovarian cysts registered in our hospital.

A total of 46 newborns with neonatal ovarian cysts, who applied to the Pediatric Surgery Clinic between April 2012 and April 2022, were included in the study. The antenatal diagnosis was made in 38 (82.6%) of these patients. Antenatal diagnosis age ranged from 28 to 38 weeks of gestation. Cysts with a diameter of 4 cm above the cysts found in the patients were accepted as large cysts. The mothers of the remaining 8 (17.4%) cases with postnatal diagnosis did not undergo antenatal ultrasonographic assessments in the last two months of their gestation. These two patients were directed to our clinic for control within the first three weeks after delivery due to the detection of an abdominal mass. Follow-up ways and treatment methods were assessed.

The average age at diagnosis was 33 weeks of gestation. The cysts (mean  $45 \pm 17$  mm) were prevailing in the right ovary in 40 patients (87%), and 34 (74%) of the patients were considered to be large cysts. The cysts were assessed as complex cysts in 4 (8.7%) patients with large cysts and in 1 (2.2%) of 12 (26.1%) patients with small cysts. Ovarian torsion was detected in 4 (8.7%) of the cases and these cases were managed surgically. Patients with simple cysts are still followed closely intermittently by ultrasonography until the cysts disappear.

Surgical management should always be done in a way that protects the ovaries and ensures future fertility. In our series of neonatal ovarian cysts, it was feasible to perform a non-invasive follow-up method and minimally invasive surgical management.

**Keywords:** Ovarian cyst, neonatal, treatment method., surgical, medical

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## A Case of Acute Gangrenous Cholecystitis Mimicking with Acute Appendicitis

*Mehmet Sarıkaya<sup>1</sup>*

*Taner Kamaç<sup>2</sup>*

### Abstract

Acute gangrenous cholecystitis (AGC) is extremely rare in childhood. A few cases have been reported in the literature. We present a 7-year-old male patient who was diagnosed with AGC during laparoscopy, who underwent operation with the preliminary diagnosis of acute appendicitis.

In the physical examination of the patient who applied to our clinic with abdominal pain for two days, there were tenderness and defense in the right lower and middle quadrants of the abdomen. In the abdominal ultrasonography and abdominal tomography performed on the patient, the appendix could not be seen, and no additional pathology could be detected. Laparoscopy was applied to the patient with the preliminary diagnosis of acute abdomen. On laparoscopy, the appendix was mildly inflamed. When the exploration was continued, it was observed that the gallbladder was gangrenous and its wall was quite tight and about to be perforated. The patient underwent appendectomy and cholecystectomy. The patient was discharged on the 4th postoperative day.

AGC which is very rare in children should be kept in mind in cases presenting in acute abdomen clinic. Preferring the laparoscopic approach in acute abdomen cases is very useful in the detection of rare cases such as AGC.

**Key words:** acute appendicitis, gangrenous cholecystitis, laparoscopy

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## Retrospective Evaluation of Cases Diagnosed with Kawasaki Disease : A Single Institution Experience

*Tuğba KAZMACAN<sup>1</sup>*

*İbrahim İlker ÇETİN<sup>2</sup>*

*Semih SANDAL<sup>3</sup>*

### Abstract

Kawasaki disease (KD) is an acute febrile multisystem vasculitis of unknown etiology. In this study we aimed to evaluate the cases diagnosed with KD in our institution.

We retrospectively analyzed the medical records of 31 patients diagnosed with KD in our institution between January 2007- June 2013. The epidemiological, clinical, laboratory and echocardiographic findings; treatment and follow-up results were evaluated.

Male/female ratio was 1,81. Median age was 24 months . While 77,4 % of cases were diagnosed at acute stage, 22,6 % of cases were diagnosed at subacute stage. The most common findings accompanying fever were conjunctivitis (77,4 %) and oropharyngeal changes (77,4 %). While 45,2 % of cases were classical KD, 54,8 % of cases were incomplete KD. All the classical cases were diagnosed within 10 days of illness, whereas 41,2 % of incomplete cases were diagnosed after 10 days ( $p=0,009$ ). Coronary artery ectasia or aneurysm were identified in 8 cases (25,8 %), all of these cases were male ( $p=0,028$ ). There was coronary artery involvement in 16,7 % of cases diagnosed within 10 days, whereas in 57,1 % of cases diagnosed after 10 days ( $p=0,05$ ). Twenty percent of cases received IVIG after 10 days of illness and coronary artery involvement was more common in these cases. IVIG resistance was seen in 23,3 % of cases. High C-reactive protein (CRP) levels ( $p=0,017$ ) and high platelet levels ( $p=0,043$ ) were related to IVIG resistance.

The incomplete cases are diagnosed later. The cases diagnosed and treated later have more coronary artery lesions. So supporting the clinical suspicion with laboratory and echocardiographic findings to diagnose and treat especially the incomplete cases earlier; and also following up the patients regularly with both clinical and laboratory findings are important in preventing the cardiovascular complications of this disease.

**Keywords:** IVIG, incomplete, Kawasaki disease, coronary artery aneurysm, vasculitis

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## Evaluation of Patients who Admitted to the Pediatric Outpatient Clinic Between 2019-2020 and were Diagnosed with Influenza Infection

*Emrah ÇİĞRİ<sup>1</sup>  
Funda ÇATAN İNAN<sup>2</sup>*

### Abstract

We think that influenza infection, which caused epidemics among children in the years before the COVID-19 pandemic, will maintain its importance today due to the increase in children's communal living spaces outside the home. For this reason, we aimed to share with the literature how we spent a season with intense influenza infection in our pediatric patients, what kind of results we encountered and what kind of treatments we administered.

966 pediatric patients who were diagnosed with influenza infection using our hospital database were included in this study.

We found that the most common symptoms in our patients were cough (59.1%), fever (49.3%) and fatigue/myalgia (26.2%). We found that complications related to the lower respiratory tract, including acute bronchiolitis, pneumonia and croup, are important complications that may develop due to influenza, especially in children under 5 years of age. We found that 24.8% (n: 240) of our patients needed only antiviral (oseltamivir) treatment, 21.7% (n: 210) needed only antibiotic treatment, 37.4% (n: 362) needed both antibiotic and antiviral treatment, and 15.9% (n: 154) did not need any treatment.

In the influenza season, which is between October and May of each year; we should also consider influenza infection in pediatric patients brought to pediatric outpatient clinics with complaints of upper respiratory tract infections such as fever, cough and fatigue, and we should plan our diagnostic methods accordingly. We must not forget that some serious complications, such as pneumonia, can develop due to influenza.

**Key words:** Influenza; child; complication; pneumonia; acute bronchiolitis

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# International Congress of Medical and Health Sciences Studies

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## A Rare Case of Acute Epiglottitis Due to Staphylococcus Aureus in the Elderly

*Metin KILINÇ*

**Abstract**

**Keywords:**





## Weil's Disease; A Case Report

*Fatma ERSEVEN<sup>1</sup>*

### Abstract

Leptospirosis is a zoonotic infectious disease with acute, febrile, systemic involvement, characterized by widespread vasculitis due to *Leptospira* spirochetes. While the non-icteric form is seen in 90% of patients with leptospirosis, approximately 5-10% of patients have a severe form called Weil's disease, which is characterized by fever, jaundice, bleeding tendency and fulminant hepatorenal failure. We present our patient who presented with fever, hyperbilirubinemia, acute renal failure, thrombocytopenia and was diagnosed with Weil's disease with a positive *Leptospira* MAT test.

**Keywords:** Leptospirosis, weil's disease, jaundice, acute renal failure, thrombocytopenia

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## Bruxism and Botox

Büysra TOSUN<sup>1</sup>

### Abstract

Bruxism, which is one of the temporomandibular disorders, is a disorder that occurs when the stomatognathic structures are overloaded because of teeth clenching and grinding. Although its etiology is not fully known, psychological factors such as emotional stress; systemic conditions such as sleep disorders, asthma, respiratory tract infection, intestinal parasites, and temporomandibular joint diseases; malocclusion and parafunctional habits are thought to be effective in the emergence of bruxism. Although it is very difficult to diagnose due to its nonspecific pathology, it is aimed to eliminate the cause in treatment. Dentists have a great responsibility in the treatment and the aim is to reduce grinding by protecting the teeth and as a result, to eliminate the existing pain in the facial and temporal regions.

Botulinum toxin (Botox), which is frequently used in facial aesthetics, is an exotoxin produced from Clostridium Botulinum. This toxin, which blocks the release of acetylcholine in cholinergic nerve motor endplates, causes temporary inactivation of muscles and glands. This treatment method, which can also be used in the treatment of headache and myalgia, can also be used in the treatment of temporomandibular joint disorders and bruxism. Botox, which is usually applied to the masseter muscle, can also be applied to the temporal muscle together with the masseter muscle. Botulinum toxin has been proven to reduce the symptoms of bruxism, and its effects on sleep bruxism have still not been fully evaluated. Although there are studies stating that splint treatment and botox application are equally effective in reducing pain, botox application in the treatment of bruxism is a current treatment option and more controlled studies are needed on this subject.

**Keywords:** Botox, Botulinum toxin, Bruxism, Facial pain, Temporomandibular disorder

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## A Case of Onychomycosis Due To *Aspergillus Niger*

Esma AKKOYUN BİLGİ<sup>1</sup>

Meltem UZUN<sup>2</sup>

### Abstract

Onychomycosis is the most common nail disease characterized by discoloration, thickening and separation from the nail bed and is a fungal infection of the nails. Onychomycosis is usually caused by dermatophytes and may also be caused by non-dermatophytic mold and yeast species. *Aspergillus* species appear as a non-dermatophytic mold cause of onychomycosis. *Aspergillus niger*, an opportunistic filamentous fungus, may cause onychomycosis as a non-dermatophytic mold.

Our case is a 61-year-old male patient with a history of onychomycosis caused by *A.niger* without any history of chronic disease and trauma. Our case said that he was interested in gardening and cleaning the algae that formed on the stones at the seaside was among his hobbies. Hand and toenails were yellowish color, nail thickening and deformity were detected. Since our case was a pharmacist, he stated that he used topical isoconazole nitrate twice a day for two months. When he could not respond to topical therapy, he was given terbinafine hcl tb in a hospital He used 2 cycles of systemic medication but stated that he had to interrupt treatment because of elevation of liver enzyme levels. Systemic Itraconazole treatment was started in our case and liver enzymes were monitored. Following this, his complaints were reduced.

Septate hyphae were seen in dark field microscopy with calcofluor -white staining of the samples. In reproductive cultures, no growth was observed on the cycloheximide Sabouraud dextrose agar (SDA) medium, whereas in the SDA medium without cycloheximide black velvety colonies was observed. Radially extending conidial heads with biserial fialid were observed in the lactophenol cotton blue preparation made from the growing culture. The DNA sequence of the internally transcribed spacer region of the clinical specimen was identified as *A.niger*.

Although *A.niger* is frequently seen in systemic infections, it is a rare agent in onychomycosis cases.

**Keywords:** *Aspergillus niger*, Fungal culture, Onychomycosis, Fingernails, Antifungal

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## Evaluation of Cytomegalovirus Seroprevalence among Pregnant Women in Kastamonu Region, Turkey

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Melike YAŞAR DUMAN<sup>3</sup>

Çetin KILINÇ<sup>4</sup>

### Abstract

Cytomegalovirus (CMV) is a human pathogen in the *Herpesviridae* family. It is also the type of virus that most commonly causes congenital infections. This study aimed to retrospectively reveal the seroprevalence of CMV in pregnant women in the Kastamonu region, Turkey. Seropositivity of anti-CMV IgM and anti-CMV IgG of 4946 and 1487 pregnant women, respectively, who applied to Kastamonu Training and Research Hospital between January 2018 and August 2022, were examined in this study. The pregnant women were separated into three age groups: 15-24, 25-34, and 35-44. Anti-CMV IgM, anti-CMV IgG, and anti-CMV IgG avidity tests were performed using the chemiluminescence microparticle immune assay method on the Abbott Architect i2000SR instrument per the manufacturer's instructions. Seropositivity of anti-CMV IgM and anti-CMV IgG were 2.6% (n=127/4946) and 96.2% (n=1431/1487), respectively. IgG avidity test results of 37 of 127 anti-CMV IgM seropositive pregnant women were reached. A low avidity index was determined in one pregnant, a gray zone index in two pregnant, and a high avidity index in 34 pregnant women. The highest anti-CMV IgM and anti-CMV IgG seropositivity were in the 35-44 age group at rates of 3.0% and 97.4%, respectively. However, no significant difference was among the age groups for CMV seropositivity ( $P>0.05$ ). CMV seropositivity was high in Kastamonu, like in other CMV seroprevalence studies in Turkey. In conclusion, we believe that screening tests for CMV should be routinely done for all pregnant women in Kastamonu. In addition, it is significant for individuals to be informed about the risks of congenital CMV infection and prevention methods.

**Keywords:** Cytomegalovirus, IgG, IgM, pregnant women, seroprevalence

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## Evaluation of Poisoning Case Application to the Child Emergency Department between 2017-2019

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*Medine Aysin TAŞAR<sup>4</sup>*

### Abstract

In this study, it was aimed to retrospectively evaluate the children with poisoning admitted to emergency department in a three year period.

A total of 1224 patients between the ages of 0-18 who were admitted to Pediatric Emergency Department for accidental or suicidal poisoning were evaluated retrospectively. Patients admitted to the hospital for poisoning with food poisoning, animal and insect bites, drug and alcohol intake were excluded from the study. 1113 patients were included in the study. When the p value was less than 0.05, it was considered statistically significant.

The frequency of poisoning cases was 0.5%. The median age of the patients was 4 years, 53.5% were 0-5 years old. The median age of girls was 11 years, and the median age of boys was 3 years. It was determined that 61.5% of the cases were admitted with drug intake [most common cause paracetamol poisoning (12%)], 23.5% with substance intake [most common cause detergent (27,6%)] and 14.9% with carbon monoxide exposure. The causes of the poisoning were accident in 73.5% and suicide in 26.5%. The median age of the patients was 3 years in those who were poisoned by accident and 16 years in suicide ( $p = 0.001$ ). When the male / female ratios of the cases who were poisoned by suicide and accident were evaluated, it was found that the female admission with suicide was statistically significantly higher ( $p = 0.001$ ). No death was found in any of the cases followed.

Drugs, detergents / corrosive substances / pesticides and carbon monoxide poisoning were the most common causes of poisoning. With the simple precautions that can be taken, prevention of poisoning, which is an important cause of illness and death in childhood, will be provided.

**Keywords:** Children, Children's Emergency, Suicide, Poisoning, Carbon monoxide.

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## Nursing Care of Newborn Who Has “Rare Disease, Gastroschisis”

Nursing care of newborn who has “rare disease, Gastroschisis”

*Derya SULUHAN<sup>1</sup>*

### Abstract

Gastroschisis is one of the congenital abdominal wall anomalies. Although the cause of gastroschisis is not known exactly, it is a disease that requires surgical intervention in the early period after birth. In newborns with gastroschisis, surgical intervention is required in the early period after birth because of the increased risk of mortality and complications in infancy. To decrease risk of mortality and complications, pediatric nurses have vital roles for care of newborn with gastroschisis in the preoperative and postoperative period. The aim of the nursing care of the newborn who has abdominal surgery is to have a comprehensive, systematic and continuous care process. Planning to nursing process focus on needs of newborn with gastroschisis can make a significant contribution to shortening the length of hospital stay, reducing the number and severity of adverse events, and preventing other complications such as necrotizing enterocolitis. Preoperative and postoperative nursing care focus on preventing hypothermia, minimizing fluid loss, maintaining intra-abdominal perfusion, parenteral nutrition, and protection from infection, mother-newborn attachment. Nursing diagnoses determined for the patient's signs and symptoms and providing appropriate nursing care for these diagnoses are very important for the prognosis of the disease. As a result, nursing outcomes and nursing interventions should be determined and the nursing process should be carried out according to possible and current nursing diagnoses for newborn with gastroschisis during preoperative and postoperative nursing care. The aim of this review is to present care of newborn with gastroschisis in line with literature.

**Keywords:** infancy, gastroschisis, nursing process, surgery, care

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## COVID-19 and D-Dimer Levels

*İbrahim Güven ÇOŞGUN<sup>1</sup>*

### Abstract

The COVID-19 pandemic has caused an important health problem all over the world. The parameters to be used in the follow-up of the disease will provide significant benefits in the management of the disease. Today, after its first identification, it has continued to spread with newly developed variants, causing serious loss of workforce, mortality, and morbidity. In the Covid-19 pandemic, the fatal disease with cytokine storm, systemic inflammatory response, and coagulopathies that developed after the infection of the SARS-CoV-2 virus deeply affected the whole world. Studies have investigated the value of high D-Dimer levels in predicting disease severity.

In our study, a search was made in PubMed, Scopus, and Web Of Science databases using the keywords 'D-dimer' and 'COVID-19', 'D-dimer' and 'coronavirus'. Standardized mean differences were used to investigate the difference between serum D-dimer levels and disease severity and for forest plot analysis of the data.

In the combined results of the evaluated studies, the serum D-Dimer levels were found to be higher in severe COVID-19 patients than in non-severe COVID-19 patients. When the D-Dimer levels of all COVID-19 patients and severe COVID-19 patients were compared, the d-dimer level was significantly higher in severe COVID-19 patients.

The reason for the increase in D-Dimer levels in severe COVID-19 patients is not known exactly, but we think that it may be helpful in the early diagnosis and first treatment choice of severe COVID-19 patients.

**Keywords:** COVID-19, Severity, Serum, D-dimer, Levels

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## Brentuximab + ICE for Refractory Hodgkin's Lymphoma: A Case Report

*Erdean Ak<sup>1</sup>*

### Abstract

The majority of children and young people with classical Hodgkin lymphoma (cHL) are cured with first line treatment and treatment failure rates with the most effective pediatric regimens are approximately 10% in low stage and 15% to 20% in advanced cHL (1) Brentuximab vedotin (BV) is an effective and well-tolerated treatment for patients with classical Hodgkin lymphoma (HL). It was initially approved by the US FDA for the treatment of HL after failure of autologous hematopoietic stem cell transplant (autoHSCT) or after failure of at least two prior lines of multiagent chemotherapy in patients who are not transplant candidates, and then subsequently, as consolidation therapy after autoHSCT in patients who are at high risk for relapse. In 2011, brentuximab vedotin (BV), an antibody-drug conjugate (ADC) that targets CD30 on the surface of Reed–Sternberg cells, became the first United States Food and Drug Administration (US FDA)-approved immunotherapy for the treatment of HL. In 2016 and 2017 (2) In our study, we presented a child diagnosed with resistant CD 30+ cHL who received ICE + brentixumab treatment.

**Keywords:** Child, Hodgkin, Brexitunumab

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## Case Report of Rosai-Dorfman Disease with Extranodal Involvement

*Begümhan DEMİR GÜNDOĞAN<sup>1</sup>*

### Abstract

Rosai-Dorfman disease (RDD), also known as sinus histiocytosis with massive lymphadenopathy (SHML), is more common in children and young adults. The disease may progress with diffuse painless lymphadenopathy, high fever, leukocytosis, increased erythrocyte sedimentation rate, polyclonal hypergammaglobulinemia, weight loss, and may cause involvement of various organs. The disease typically presents clinically with massive bilateral lymphadenopathy. Extranodal involvement is common and can occur in more than 40% of patients, sometimes without lymphadenopathy. The most commonly affected extranodal areas include the skin, nasal cavity and paranasal sinuses, the eye and its surroundings, and the central nervous system. Synchronous involvement of extranodal regions is possible. In the literature, bone involvement has been seen in less than 10% of cases, and isolated bone involvement is seen in 2% of cases. Definitive diagnosis can be made as a result of histopathological examination of lymph node biopsies.

We present a one-year-old male patient who initially applied to our clinic with only skin lesions and signs of anemia. In the bone examination radiographs taken during the follow-up of the patient, widespread lytic lesions were detected in all bones. As a result of bone and skin biopsy, dermal histiocyte infiltration was found as "Benign Cephalic Histiocytosis" and "Rosai-Dorfman Disease". Antibiotics, corticosteroids, radiotherapy and chemotherapy have been tried for the treatment of the disease, but an effective treatment method has not been found yet. The best treatment for RDD is unknown due to its low incidence.

Most patients require only observation as patients tend to resolve spontaneously. Patients with recurrent symptoms, particularly rapid lymph node swelling and fever, have been successfully treated with steroids. Surgical treatment is indicated in patients with compression findings that do not respond to steroid therapy. 2mg/kg/day steroid (prednisolone) treatment was started in our patient and steroid treatment continued for 4 months.

Steroid treatment was tapered and discontinued, as significant regression was observed in the lesions in the bone survey imaging taken during the follow-up. He is still in remission clinically and radiologically. Death due to this disease is a very rare complication in cases of vital organ involvement.

Therefore, we argue that for most cases of this rare disease, observation is the mainstay of treatment with only basic symptoms being treated. Few cases have been reported in the literature, and the recent literature on pathogenesis, epidemiology, diagnostic factors, prognosis and treatment has been reviewed.

**Key words:** Rosai-Dorfman disease, extranodal, childhood, lymphadenopathy, extranodal.

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## The Floating Knee in Pediatric Patients: Case Report and Literature Review

*Hüseyin Fatih SEVİNÇ<sup>1</sup>*

### Abstract

A 16-year-old male patient applied to the emergency department after falling from a height. After the physical examination and x-rays taken in the emergency room, the patient was diagnosed with left femur distal metaphysis fracture and left tibia proximal epiphysis salter haris type 4 fracture. The patient's neurovascular examination was normal. Closed reduction and long leg splint fixation were applied to the patient with diffuse swelling around the left knee. In the follow-up, the patient who had no neurovascular problems was fixed with an open reduction plate screw for the left femur distal metaphysis fracture, 1 headless screw sent intraepiphysis for the left tibia proximal epiphysis salter haris type 4 fracture, and 2 cannula screws with scales sent to the metaphysis. Long leg splint fixation was applied. Long leg circular plaster cast fixation was applied after the swelling decreased on the 3rd postoperative day. There were no complications in the early postoperative period. On the 45th postoperative day, the plaster cast fixation was removed and knee joint movements were started with partial load. He was referred to physical therapy and rehabilitation for knee range of motion at 2 months postoperatively. After the postoperative 3rd and 6th month follow-ups, it was observed that the fractures were unionized and there was no limitation in the range of motion of the knee. In the postoperative 1st year follow-up, it was observed that varus deformity originating from the proximal part of the tibia started to occur in the knee, but it was observed that it did not cause any clinical problems for the patient.

Fractures of the ipsilateral tibia and femur are extremely rare injuries in the pediatric patient. Anari et al. in their systematic review study conducted in 2017, only 97 patients were identified in 6 articles on ipsilateral tibia and femur fractures in pediatric patients. There is no consensus on the treatment of these injuries, which are defined as floating knee and are very rare in children. These injuries, including physeal fractures in children, are often seen in complications. Vergara et al. in their study, complications were found at a rate of 32%.

Floating knee injuries in children are rare but should be considered in terms of complications. Especially in physeal fractures, anatomical reduction and fixation should be done. After the treatment, the patients should be followed until the end of the patient's growth period.

**Keywords:** floating knee; femur fracture; tibia fracture; pediatric

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## Evaluation of Vitamin D and DEXA results in Pediatric Distal Radius Fractures

*İsmail Gökhan ŞAHİN<sup>1</sup>*

### Abstract

In this study, demographic data (height, weight), 25 hydroxycholecalciferol (vitamin D) and Dual-energy X-ray absorpsiometry (DEXA) and X-ray absorpsiometry (DEXA) of 59 children who applied to the orthopedics and traumatology outpatient clinic due to pediatric distal radius fractures were evaluated. determines the scores. Patients under the age of 15, with no previous history of distal radius fracture, no history of long-term drug therapy, and no known endocrine disease history were included in the study. In the study, 49 of the 59 patients whose data were collected at their admission to the outpatient clinic were male and 10 were female.

The mean age of the patients was  $11.28 \pm 2.43$  years, the mean height was  $152.64 \pm 15.41$  cm, the mean weight was  $46.71 \pm 18.06$  kg and the mean body mass index was  $19.4 \pm 4.64$  kg/m<sup>2</sup>. The vitamin D levels were  $18.98 \pm 6.77$  ng/ml. Of the 59 patients examined in this study; There were 10 patients (16.95%) with hip or lumbar Z scores of -2.0 and below, 23 patients (38.98%) with vitamin D levels of 15 ng/ml and below, and 4 patients had both vitamin D levels and hip or lumbar Z scores. score was found to be significantly low (6.78%). Replacement therapy was planned for a total of 29 patients (49.15%), and patients with a Z score lower than -2.0 were referred to the pediatric outpatient clinic.

Pediatric distal radius fractures are common traumas and cases requiring further investigation may be overlooked. We think that 4 patients (6.78%) whose both vitamin D and Z scores were found to be low in common are significant in terms of showing the overall rate. Identifying these patients and referring them to the pediatric outpatient clinic is important for the prevention of possible childhood traumas.

**Keywords:** pediatric trauma, distal radius, fracture, DEXA, 25 hydroxycholecalciferol

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## Pathogenic Mutation in The *Ndufs8* Gene of a Turkish Patient with Mitochondrial Complex Deficiency Nuclear Type 2

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Tunay DOĞAN<sup>2</sup>

### Abstract

Mitochondrial complex I deficiency is an autosomal recessive disorder characterized by clinical features such as nuclear type 2, nystagmus, hypertrophic cardiomyopathy, respiratory failures, apnea, malnutrition, hypotonia, central nervous system damage, developmental retardation, dystonia, gait disorders, epilepsy, hyperreflexia, Leigh syndrome-like white matter involvement, and impaired lactate and pyruvate metabolism. Homozygous mutations in the *NDUFS8* gene, which expresses the NADH dehydrogenase enzyme, are responsible for the etiology of the disease. The NADH dehydrogenase enzyme is the core subunit of the mitochondrial membrane respiratory chain NADH dehydrogenase (Complex I), which catalyzes the transfer of electrons from NADH through the respiratory chain using ubiquinone as the electron acceptor. It is necessary for the catalytic activity and formation of complex I. The Turkish patient who was the subject of our presentation was a 2-year-old man and was admitted to our center with severe neuromotor retardation and leukodystrophy findings. All exome sequencing (WES) analysis was planned and the genetic variations obtained as a result of the analysis were evaluated with the via *in silico* tools. The pathogenic variant *NDUFS8* gene [NM\_002496.4] c.460G>A (p.Gly154Ser) was found homozygous. Existence of variation related to Sanger sequencing was confirmed. As a result of the variation, the amino acid glycine at position 154 is transformed into a serine, and 17 of the 24 different *in silico* analysis tools predicted this variation as the cause of the disease. The variation we detected was never homozygous in gnomAD database. There are entries that are likely pathogenic in ClinVar and PubMed databases. Variations that disrupt cellular metabolism by affecting the functional domain of *NDUFS8* may cause different phenotypic involvements in patients at different ages. At this point, we think that the case presented will contribute to the literature.

**Keywords:** NADH dehydrogenase, mitochondrial complex, *NDUFS8*, autosomal recessive, WES.

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## Investigation of the Protective Effect Of L-Carnitine in Kidney Function Disorders Induced by Lipopolysaccharide

Muhammet Yusuf TEPEBAŞI<sup>1</sup>  
İlter İLHAN<sup>2</sup>

### Abstract

One of the organs frequently damaged in sepsis is the kidney. Kidney damage induced by sepsis is a clinically dangerous condition with a high mortality rate. The purpose of this study was to look into the effects of L-carnitine on kidney damage caused by lipopolysaccharide in rats. Thirty-two adult male rats, control (saline intraperitoneal (i.p.) 4 weeks), LPS (LPS at 3 mg/kg concentration on the first day followed by LPS i.p. at 0.25 mg/kg weekly for 3 weeks), Carnitine (L-carnitine 300 mg/kg i.p. 4 weeks), LPS+L-carnitine (LPS at 3 mg/kg concentration on the first day, followed by LPS at 0.25 mg/kg weekly for 3 weeks, and L-carnitine 300 mg/kg i.p. for 4 weeks ) were divided into 4 equal groups. At the end of the experiment, the total oxidant status (TOS) and total antioxidant status (TAS) levels were determined from a portion of the kidney tissue of the sacrificed rats, and the oxidative stress index (OSI) was calculated.. The qRT-PCR method was used to determine the levels of p53 and SIRT-1 mRNA in the remaining kidney tissue. The LPS group had significantly greater TOS, OSI, urea, and creatinine levels than the other groups ( $p<0.05$ ). TAS levels were substantially lower in the LPS group than in the other groups ( $p<0.05$ ). SIRT1 levels were considerably lower in the LPS group, although p53 levels were significantly greater. SIRT1 levels increased in the LPS+L-carnitine group, but p53 levels decreased ( $p<0.05$ ).As a result, it has been determined that L-carnitine has an antioxidant and antiapoptotic effect on LPS-induced kidney damage.

**Keywords:** L-carnitine, SIRT-1, p53, Oxidative stress, Lipopolysaccharide

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## Investigation of *Viburnum Opulus* Apoptotic Effect on LNCaP Prostate Cancer Cell Line

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### Abstract

The most common cancer seen in men worldwide is prostate cancer and ranks second in the deadliest cancer types. *Viburnum opulus* is a type of tree that produces small red fruits. Shell, fruit, flower and juice of *V. opulus* are widely used in various fields and traditional medicine. Studies have shown that *V. opulus* also has an anti-cancer effect. For this purpose, the apoptotic effect of *V. opulus* was investigated in the LNCaP prostate cancer cell line. LNCaP human prostate cancer cells were treated with *V. opulus* extract in a concentration range of 1-200  $\mu$ M. Cell viability was determined by XTT test and IC<sub>50</sub> dose was determined. Expressions of apoptosis related genes were determined by quantitative RT-PCR analysis. *V. opulus* showed cytotoxic effect on the LNCaP cell line, and differences in the expressions of apoptosis related genes were observed. Significant increases in BAX, CASP7, CASP8 and P53 genes expressions showed that proapoptosis pathway was active, while CASP3 expression was significantly decreased. It was suggested that extrinsic pathway of apoptosis may be effective due to increases in CASP7 and CASP8 gene expression. However, molecular mechanism of apoptotic activity of *V. opulus* needs to be investigated in more detail.

**Keywords:** *Viburnum opulus*, Prostate cancer, Apoptosis, LNCaP, RT-PCR

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## Students Studying in Health Departments of a Private University Measuring Hand Hygiene Belief Levels

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### Abstract

The concept of hygiene, which literally means 'Health Information', aims to minimize the transmission of infection in general. Hand hygiene, which is the cause of many cross-contamination in the health sector, is very important. However, paying attention to hand hygiene and complying with hand hygiene issues is seen by many as a simple issue that is not paid attention to. This situation has begun to change with the Covid-19 pandemic, which emerged in the Wuhan province of China and was diagnosed in January 2020, and the importance given to hygiene has increased. In addition to this, it is necessary to inform individuals about hygiene and hand hygiene, to provide special training for the line of work, to correct known mistakes, and to provide necessary training. It is important that hygiene and cleaning materials such as antiseptics, disinfectants and soap are ready for use and in sufficient quantities. The aim of this study; To measure the level of belief in hand hygiene of students studying in some health departments at a private university. The 22-item 5-point Likert scale "Hand Hygiene Belief Scale" developed by Mevlüde Karadağ, Nuriye Yıldırım, Özge Pekin İşeri was applied to 300 individuals on a voluntary basis. Statistical analyzes were performed using the SPSS program and  $p < 0.05$  was considered statistically significant. The stated scale was applied on a voluntary basis to 300 relevant people studying in Medical Laboratory, Oral and Dental Health, Nursing, Anesthesia, Dental Prosthesis Technology programs. It has been found that students who do internship in all departments have a significant awareness of hand hygiene belief compared to those who do not. In addition, it has been determined that nursing students who have a 4-year undergraduate education have a higher belief in the concept of hand hygiene than other students who have a 2-year associate degree. Among the associate degree programs, the level of belief of the students studying Oral and Dental Health is higher than other departments, that hand hygiene is important and that the infections on the patients will be reduced by hand hygiene. The pandemic process we are experiencing has increased the importance of hygiene. It is thought that the reason for this situation is that students studying in Oral and Dental Health and Nursing programs are more confident in hygiene and that they work in risky groups in contact with microorganisms. In addition, it was concluded that the most important factor in minimizing the risk of infection for both themselves and the patient is related to belief in hand hygiene. It is recommended that courses such as hygiene education and sterilization should be added to the students of each department in the curriculum of YÖK, or that these trainings should be given to the assigned health workers as mandatory.

**Keywords:** Hand Hygiene, Cleaning, Infection

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## Effects of Psychological Capital of Medical Faculty Students on their Well-being Levels

*Mustafa AKKUŞ<sup>1</sup>*

### Abstract

According to Martin Seligman, “well-being” is the presence of Positive emotions, Engagement, Relationships, Meaning and Accomplishment (PERMA). Psychological capital (PsyCap) includes four sub-dimensions: self-efficacy, hope, resilience and optimism. PsyCap is a high-level structure sharing similarities as well as the differences of these four sub-dimensions. The similarities between these dimensions help the accomplishment of motivation, desired attitudes, and tasks and goals. In several studies, PsyCap is demonstrated as a predictor of well-being. We aimed to investigate this relationship, investigated in different groups and some students, in medical school students.

The study was conducted by administering the Sociodemographic Data Form, PsyCap Questionnaire and PERMA (Well-Being Scale) to 502 medical school students attending Erzincan Binali Yıldırım University, Faculty of Medicine. Approval was obtained from the Clinical Research Ethics Committee (decision date: October 27, 2022; decision number: 04/13). SPSS Statistics 22.0 program was used. Statistical significance was accepted as  $p < 0.05$ . In the analysis, descriptive statistics, independent samples t-test, ANOVA and Pearson correlation tests were used.

There was a statistically significant positive correlation between the mean scores obtained from the PsyCap Questionnaire and Well-Being Scale ( $r = 0.733$ ,  $p < 0.05$ ). The well-being levels of those who did not choose the medical school willingly, thought of leaving medical school education, received psychiatric support before, and/or exercised less frequently were significantly lower ( $p < 0.05$ ). Of the male students, those who exercised more frequently obtained significantly higher scores from the PsyCap Questionnaire ( $p < 0.05$ ). Hope and self-efficacy levels of those who had a greater number of weekly study hours were significantly higher ( $p < 0.05$ ). There was a significantly positive relationship between the participants' PsyCap and their well-being levels. Increasing the number of exercises and strengthening psychological capital with some interventions will contribute to the improvement of well-being levels.

**Keywords:** Well-being, Psychological capital (PsyCap), Medical school students

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## Pediatric Behçet's Disease: A Single Center Experience

Gülfer AKÇA<sup>1</sup>

### Abstract

Behçet's disease is a multisystemic vasculitis with high mortality and morbidity, characterized by recurrent oral ulcers, skin and mucosa manifestations, 15-20% seen in childhood. In this study, it was aimed to examine the clinical findings, system involvement and treatment processes of pediatric Behçet's disease. Demographic findings, clinical features, laboratory and diagnostic tests, system involvements, treatments and prognoses of patients diagnosed with pediatric Behçet's disease in general or minor pediatric services between November 2020-2022 were retrospectively reviewed. Nine of 17 patients were male (M/F=1.12). The mean age is  $14.76 \pm 1.75$ , the age of first admission is  $12.52 \pm 2.29$ . Pathergy test positivity is 52.9%, HLAB51 positivity is 47.1%. All patients had recurrent oral ulcers and 52.9% had painful genital ulcers. Genital ulcer is statistically significantly more common in female gender (OR=3.938, 95% CI 1.128-13.743,  $p=0.007$ ). Ocular involvement observed in 41.2%, uveitis is the most common (35.3%). Venous thrombosis (35.39%) is the most common in vascular involvement, and arthritis (35.3%) is the most common musculoskeletal system involvement. All patients with CNS involvement (29.4%) had recurrent headaches, diplopia, and ICH findings, and the mean CSF pressure is 31 cmH<sub>2</sub>O. Transverse sinus thrombosis (80%) is the most common. The most preferred treatment is colchicine (97%), azathioprine in uveitis, methotrexate in arthritis, and pulse steroid in CNS involvement. All patients with thrombosis received enoxaparin and anticoagulant therapy. Three patients with severe vascular involvement and relapses were treated with TNF- $\alpha$  blocker. One patient with GIS involvement and 2 patients with ocular involvement were operated. Behçet's disease treatment is difficult due to its multisystemic nature and a multidisciplinary approach is essential in the management of patients.

**Keywords:** Colchicine, HLAB51, Oral and Genital Ulcer, Pathergy Test, Pediatric Behçet's Disease

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## Volumetric Magnetic Resonance Imaging Analysis of Cases Diagnosed with Recurrent and Complex Febrile Convulsions

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### Abstract

Febrile seizures are a common disease in children before 5 years of age, affecting 2–5% of children. Whether febrile seizures cause damage to brain structures in children is a critical question. Therefore, this study aimed to investigate the differences in gray matter volume between complex febrile seizures and recurrent simple febrile seizures. Twenty patients with complex febrile seizures (mean age:  $21.5 \pm 10.6$  months) and 18 patients with recurrent simple febrile seizures (mean age:  $34.1 \pm 16.8$  months) with structural magnetic resonance imaging (MRI) scans were studied retrospectively. Cortical volumetric analysis was performed using a voxel-based morphometry method with the CAT12 (Computational Anatomy Toolbox) toolbox within SPM12 (Statistical Parametric Mapping). Statistical comparison between groups was made using t-contrasts in the SPM independent t-test model ( $p < .001$ , uncorrected for multiple comparisons). Approval for the study was received from the Clinical Research Ethics Committee of Afyonkarahisar Health Sciences University (decision no: 414, date: 05.08.2022). Compared with recurrent simple febrile seizures, there was a significantly lower volume in the right entorhinal area of the complex febrile seizures group. This study highlights that subtle differences in brain volumes between children with a history of recurrent simple febrile seizures and complex febrile seizures can be detected by quantitative MRI. Further prospective studies would probably help our understanding of this association of the entorhinal cortex to complex and recurrent simple febrile seizures.

**Keywords:** Complex febrile seizures, recurrent simple febrile seizures, magnetic resonance imaging, voxel-based morphometry

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## Investigation of the Effect of Physical Activity Level on Sleep Quality in Dialysis Patients

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*Zeynep GÜRLER AKOL*

### Abstract

Summary Sleep disturbance is an important problem affecting the quality of life in dialysis patients. The aim of this study is to examine the effect of physical activity level on sleep quality in dialysis patients. The study was carried out with a total of 70 hemodialysis patients, including hemodialysis (n=15), home hemodialysis (n=12), hemodiafiltration (n=25) and peritoneal dialysis (n=18) groups between April 2022 and November 2022. Demographic information and blood parameters of the participants were recorded. Physical activity levels were evaluated with the International Physical Activity Questionnaire (IPAQ) and sleep quality was evaluated with the Pittsburgh Sleep Quality Index (PUKI). Data were analyzed with SPSS 25.0 (IBM SPSS Statistics 25 software (Armonk, NY: IBM Corp.)) package program. Continuous variables were expressed as mean  $\pm$  standard deviation, and categorical variables were expressed as numbers and percentages. The suitability of the data to the normal distribution was examined with the Kolmogorov Smirnov test. Spearman correlation analysis was used to examine the relationships between numerical data. In all analyses,  $p < 0.05$  was considered statistically significant. Our study was completed with the evaluation of 70 individuals (age =  $54.74 \pm 17.12$ , gender = 31 females/39 males) receiving dialysis treatment. At the end of the study, the total PUKI score was  $5.2 \pm 3.32$ , the IPAQ score was  $93.53 \pm 310.45$ , transportation total  $218.62 \pm 360.67$ , housework total  $213.41 \pm 474.08$ , leisure time total  $114.79 \pm 229.03$ . The study shows that 35.7% of dialysis patients have impaired sleep quality. In the correlation analysis, no significant relationship was found between the total score of PUKI and IPAQ work ( $p = .379$ ,  $r = -.107$ ) and the total score of PUKI and leisure activity ( $p = .264$ ,  $r = .135$ ). However, a weak negative correlation was found between leisure walking activity and total PUKI score ( $p = 0.032$ ,  $r = -0.257$ ). Dialysis patients are recommended to be physically active and especially to do walking activities.

**Keywords:** Hemodialysis, Physical activity level, Sleep quality

## Trunk Proprioception and Its Relationship with Balance in Patients with Cervical Dystonia

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*Ayşe TOKÇAER BORAN<sup>3</sup>*

### Abstract

Trunk is the central part of the body, and is essential for balance. Impaired trunk proprioception is commonly reported in neurological disorders; however, trunk proprioception has not been examined in patients with Cervical Dystonia (CD). The primary aim; therefore, was to compare trunk proprioception between patients with CD and healthy people. Secondary aim was to investigate the relationship between trunk proprioception and balance in patients with CD.

This cross-sectional study included 11 patients with CD and 11 healthy people. Trunk proprioception was assessed with a digital inclinometer that measures trunk reposition error. Trunk impairment scale, Berg Balance Scale, four step square test, one-leg stance test, and activities-specific balance confidence scale were used to evaluate balance. The Mann-Whitney U test was used to compare between groups, and the Spearman correlation coefficient ( $r_s$ ) was used to examine the relationship between trunk reposition errors and other outcome measures.

Patients with CD demonstrated higher trunk reposition errors compared to than healthy controls ( $p=0.031$ ). In the CD group, trunk reposition error had negative moderate correlation with trunk impairment scale ( $r_s=-0.603$ ,  $p=0.049$ ) while was not correlated with other outcome measures ( $p>0.05$  for all).

**Conclusions:** The loss of the ability in the trunk proprioception is showed, and the trunk proprioception is associated with the trunk control in patients with CD. These findings suggest that trunk proprioception deficits should receive attention in the assessment and treatment for the CD rehabilitation.

**Keywords:** Balance, cervical dystonia, proprioception, rehabilitation, trunk.

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## Reflection of Smell Disorders on Ent Polyclinics after the Covid-19 Pandemic

*Songül Demir<sup>1</sup>*

### Abstract

The Covid-19 disease, which entered our lives with the pneumonia cases of unknown cause reported from China for the first time in the last months of 2019, has become a pandemic infection that has spread all over the world in time. There are many Covid-19 patients who experience sudden loss of smell and whose complaints continue for a long time after the disease. In this study, our aim is to examine the diagnosis of admission to ENT polyclinics and to show increase by numerical comparison of the patient group who applied with smell and taste disorders before the Covid-19 pandemic and after.

The diagnoses of patients who applied to the ENT polyclinics of our hospital between January 2018-January 2022 were examined, and the diagnosis of smell disorder were evaluated. The number of patients diagnosed before March 2020 (when the first case was seen in our country) and the number of patients diagnosed after the pandemic (that is in March 2020 and later) were compared.

The number of patients in the pre-pandemic period was 114(86F, 28M, MA 33.86). The number of patients admitted after the pandemic was 476 (30 F, 172M, MA 38.50). According to the outpatient clinic application during a similar period before and after the pandemic, the number of patients presenting with smell disorders after the pandemic has increased more than four times. As this study shows, the Covid-19 pandemic has caused a serious increase in the number of patients with smell disorders in ENT practice

**Keywords:** Covid 19, pandemic, smell disorders

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## Evaluation of Dose Distribution Verification of Treatment Plans by Using Electronic Portal Imaging Device at Different Gantry Angles in Intensity Modulated Radiation Therapy

*Alper ÖZSEVEN<sup>1</sup>*

### Abstract

In intensity modulated radiotherapy (IMRT), verifying the accuracy of treatment dose distributions (quality assurance) before the treatment of the patients is critical for the success of treatment. Electronic portal imaging device (EPID) can be used for this verification process. Verifying process can be performed by fixing the treatment head (gantry) and irradiating at a fixed angle, as well as irradiating at the gantry angles predefined in the treatment planning process. In this study, it was aimed to evaluate the change in dose accuracy by comparing these two different quality assurance implementation procedures. 30 treatment fields were evaluated in terms of quality assurance in two different irradiation setups with fixed and non-fixed gantry angles. Obtained dose distributions, after irradiation of 30 treatment fields, were compared with the predicted dose distributions using area gamma index < 1 values with evaluation criteria of 3% dose difference at 3mm (3%/3mm) via Eclipse Portal Dosimetry software. Wilcoxon signed-rank test was used to evaluate the statistical significance. In addition, fixed and non-fixed gantry angle dose distributions were directly compared with each other by using area gamma index < 1 values with evaluation criteria 3%/3mm and 1%/1mm. According to the results, for 3%/3mm criteria, the median (min-max) values of fixed and non-fixed gantry angle irradiations were; 98.55% (93.70% - 100.00%) and 99.35% (93.90% - 100.00%), respectively ( $p=0.03$ ). In the measurements where fixed and non-fixed gantry angle irradiations were directly compared with each other, the average value was found to be  $100\% \pm 0\%$  in the 3%/3mm. For 1%/1mm criteria, this value was 98.75% (88% - 100.00%). Results indicated that, while the difference was significant for the predicted dose comparisons; in the cases where they were directly compared with each other, the difference varied with the selected evaluation criteria.

**Keywords:** Electronic portal imaging device, gamma index, intensity modulated radiation therapy, quality assurance, portal dosimetry

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## Pituitary Stem Cells: What We Know So Far

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*Aydın SAV<sup>3</sup>*

### Abstract

The pituitary gland has many pathologies, with ideal treatment modalities yet to be discovered. The fast growing research on stem cells shines light to the possibility of using pituitary stem cells as treatment options for many pituitary diseases. In this study, we have concluded extensive article research with papers published between 1953-2022.

Firstly we researched about the different pituitary cell types according to their histology and anatomy. We included the topics of: stem cell markers, differences in pituitary stem cells between neonatal/pediatric/adult glands, pituitary stem cell candidates, the known and the potential roles of pituitary stem cells in the pathogenesis, diagnosis and the treatment of pituitary gland diseases.

We researched the pituitary stem cell markers SOX2, Nestin, Sca-1, E-cadherin, S100, Prop1, Oct4, BMI-1, CD133, Beta-catenin, Pax-6, Notch2, Notch3, Pit-1, p57, TPIT, and AIP and how they influence cell differentiation processes in the gland. We looked into how age influences changes in the pituitary gland, which cells become more dominant in which age groups, and the complicated reasons behind the high regeneration capacity of the neonatal gland.

In addition to folliculostellate, follicular, and marginal zone cells, we have also done extensive research on side population, pituitary colony-forming, SOX+2, and GFRA2/Prop1/Stem (GPS) cells. Their characteristics, locations, and roles were studied, alongside with why they were thought of as potential stem cells of the pituitary, up to date with the latest research on the field.

We elaborated the techniques used in order to better understand the mechanisms behind pituitary diseases and tumors. We especially put an emphasis on the importance of better understanding the CRISPR/Cas9 technique, organoid formation, and how they will affect our future goals.

**Keywords:** Pituitary gland, Stem cells, Hypophysis, Tumorigenesis, Classification

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## Antioxidant Effects of Linoleic Acid on Amyloid-Beta Induced Glioblastoma Astrocytoma Cells

Ares ALİZADE<sup>1</sup>

### Abstract

The pathogenesis of Alzheimer's disease (AD) is not known exactly, scientists are searching for new treatment methods. Today, Traditional medicine therapy is used in the treatment of many diseases. Linoleic acid, one of the essential fatty acids known as Omega-6, has antioxidant and anti-inflammatory activity. Because of these properties, the effect of linoleic acid on AD has been questioned. In this study, it was carried out to investigate the antioxidant effects of linoleic acid on amyloid  $\beta$ 1-40 ( $A\beta$ )-induced glioblastoma astrocytoma (U-87 MG) human brain cell line, which is a model of AD.

First of all, the cytotoxic effect of linoleic acid on glioblastoma astrocytoma cells was investigated by MTT (3-(4,5-Dimethylthiazol-2-yl) test. In the study, the control group consisted of U-87 MG cell line, the second group was formed by  $A\beta$ +U-87 cell line and the third group was formed by adding linoleic acid to the U-87 cell line exposed to  $A\beta$ . To determine their antioxidant effects, total glutathione amount (T-GSH) and malondialdehyde (MDA) and glutathione reductase (GR) activities were analyzed by ELISA.

When we look at the results of MTT analysis, cell viability was found to be statistically significantly higher in the linoleic acid-treated group compared to the  $A\beta$  group. A statistically significant decrease was observed in total glutathione (T-GSH), malondialdehyde (MDA) and glutathione reductase (GR) levels in the  $A\beta$  groups compared to the control group. however, in the comparison of the  $A\beta$ + linoleic acid group and the  $A\beta$  group, these antioxidant levels were found to be statistically significant in the  $A\beta$  group ( $p<0.05$ ).

As a result of the study, linoleic acid has a protective effect by increasing antioxidant enzyme levels in an *in vitro* model of AD. Due to these effects, it is thought that linoleic acid may have the potential to be used as a preventive or alternative therapy in AD.

**Keywords:** Alzheimer's disease, linoleic acid, Glioblastoma Astrocytoma Cells, MTT analysis, Antioxidant Enzymes.

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## Investigation of the Cytotoxic Effect of *Potentilla Fulgens* Extract on A549, Skov-3, Caco-2 and HUVEC Cells

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### Abstract

Cancer is a multi-stage disease that effects more than one tissue and organ in the body and is difficult to treat. Chemotherapy, which is applied as the first applied method among treatment methods today, high levels of cytotoxicity are observed and they can also damage healthy cells.

*Potentilla fulgens*; is an annual herb with yellow flowers that grows in high altitude regions of India. It has been confirmed by modern pharmacological studies that *Potentilla fulgens* extracts, which have traditionally been used as a medicinal plant for centuries, do not have any toxic effects in humans.

We were investigated the effects of *Potentilla fulgens* methanolic root extract (PRE), which has anti-proliferative properties in various cancer cells, on cell proliferation and viability in A549, Skov-3, Caco-2 and healthy human HUVEC cell lines.

The cell lines used in the study were grown in cell culture medium. The effects of PRE on the viability and proliferation of used cells were analysed by MTT method at 24., 48., and 72. hour applications. PRE; was applied to cells seeded in 96-well plates at various concentrations in triplicate. 2% ethanol was applied to the cells in the control group.

According to the results of the MTT assay, a significant decrease in cell viability was observed in A549, Skov-3, Caco-2 and HUVEC cells as a result of the application of PRE at determined concentrations.

In addition, it has been demonstrated that the anti-proliferative effect of PRE at determined concentrations in A549, Skov-3 and HUVEC cells is time dependent.

It was observed that the application time did not effect the amount of application dose in Caco-2 cells, however, when PRE was applied at low doses to Caco-2 cells and had a proliferative effect on cell viability.

**Keywords:** *Potentilla fulgens*, A549, Skov-3, Caco-2, HUVEC, Cancer

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## Can Neutrophil-to-Lymphocyte Ratio and Platelet-to-Lymphocyte Ratio Be Used to Predict Viral Etiology in Patients with Lower Respiratory Tract Infection in the Pediatric Intensive Care Unit?

Merve MISIRLIOGLU<sup>1</sup>

### Abstract

Failure to determine the etiology in patients with lower respiratory tract infections (LRTIs) in the pediatric intensive care unit (PICU) may lead to inappropriate treatment, unnecessary antibiotic use and antibiotic resistance development, and prolonged hospital and PICU stays. Neutrophil/lymphocyte ratio (NLR) and platelet/lymphocyte ratio (PLR) are easily calculated using complete blood count parameters. In this study, it was aimed to investigate NLR and PLR values in predicting the etiology of viral respiratory pathogens in patients with LRTIs who were admitted to the PICU due to respiratory failure.

26 patients whose respiratory tract viral panel was studied from nasopharyngeal swab followed in the PICU for 7 months were included in the study and their data were recorded retrospectively from patient files. It was planned to record and analyze the demographic characteristics of the patients, complete blood count (CBC) parameters, acute phase reactants, respiratory support methods, length of stay, and the treatments they received. 61.50% (n=16) of the patients were male and their mean age was  $20.77 \pm 39.50$  (1-204) months; respiratory viral pathogen was positive in 80.76% (n=21). Co-infection was present in 5 patients. The length of stay in the PICU was  $4.88 \pm 2.97$  (3-14) days. The characteristics of the patients are given in Table-1. The results of whole blood parameters checked during the patients' admission to the PICU; It is shown in Table-2. NLR was  $3.18 \pm 3.65$  (0.19-12.14) and PLR was  $142.42 \pm 108.62$  (12.48-350.90). As a result of the analyzes performed, complete blood count, biochemistry and blood gas parameters were not found to be an effective risk factor for respiratory tract viral panel positivity ( $p > 0.05$ ) (Table-3).

NLR and PLR are easily accessible and inexpensive parameters that can only be calculated using CBC examination. According to the results of our study, we determined that PLR and NLR could not be used to predict viral etiology in critically ill children with LRTIs; however, prospective studies with larger patient groups are needed.

**Keywords:** Lower respiratory tract infections, pediatric intensive care unit, neutrophil/lymphocyte ratio (NLR), platelet/lymphocyte ratio (PLR), viral pathogens.

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## Evaluation of the Peer-Assisted Learning Model Applied in Anatomy Practical Laboratories

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*Cannur DALÇIK<sup>8</sup>*

### Abstract

“Peer-Assisted Learning Model”, can be defined as a learning method in which the students are placed in a multimodal learning, teaching, and discussion environment. In the present study we applied this teaching method to our medical students in the Anatomy labs. The aim of this teaching approach is to get the highest efficiency from the models and the cadavers used in the demonstrations and overall to improve our medical education. Therefore, to investigate the outcome of “Peer-Assisted Learning Model” a survey was applied to the first- and second-year medical students in the Anatomy practical labs.

“Peer-Assisted Learning Model” is applied in each table of 5 students. After each amphitheater class the presenter gets prepared for the next couple of days and the presents their topic to the lecturer. The lecturer fills the gaps and makes the necessary corrections and makes the presenter fully prepared for his lab presentation by using the Anatomic models and cadavers. At the end of the year a survey of ten questions was applied to total of 270 medical students at Istanbul Aydın University. The results were evaluated using the ANOVA-T test. The results show the followings: (1) due to the secure environment formed by the students the students can ask their questions without any hesitation, (2) since the presentation proceeds in a Q&A format it was possible to analyze the topic in depth, (3) it was obvious that the presenter learned and assimilated the topic much better, (4) the presenter established a behavior of selfconfidence and sense of responsibility was developed. The present results were found to be statistically significant. In conclusion, application of “Peer-Assisted Learning Model” in the Anatomy labs is more beneficial than the classical sessions.

**Keywords:** peer, anatomy, medicine, education, laboratory.

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## The Effect of Cryotherapy on Tube Thoracostomy Pain -A Randomized Controlled Study

Mertay BORAN<sup>1</sup>

Ertay BORAN<sup>2</sup>

### Abstract

A chest drain pain; ineffective cough; are some of the important presenting problems of postoperative patients who have undergone tube thoracostomy. An essential component of postoperative management after Thoracic surgery is physiotherapy. Little is known about cryotherapy following thoracic surgery. This study was conducted to evaluate the effect of cryotherapy on the pain in patients with pneumothorax who had a chest tube.

This randomized controlled trial was performed at the thoracic surgery department at the university hospital. According to the power analysis 80 patients who met the inclusion criteria were selected and randomly divided to gel pack-group-experimental group: group 1 and non-gel pack groups-control group: group 2. All patients performed 4 episodes of 4 deep breathing and 4 coughing every 1 hour. Cold application with gel pack was applied only to the group 1 before deep breathing and coughing exercises.

Pain intensity was measured with visual analog scale (VAS) and compared at rest and after 4 episodes of deep breathing and coughing in both groups. Patient demographics and pain intensity were compared between groups.

Data analysis showed that the pain score of the patients in the group 1 was lower than the pre-application score after deep breathing and coughing exercise ( $p<0.05$ ).

Coughing and deep breathing cause a disturbing chest pain in patients with chest tube. In addition to different pain treatments applied, ice packs-cryotherapy can also be used before or during coughing and deep breathing exercises to reduce the aggravation of chest pain in patients with chest tube.

**Keywords:** pain cryotherapy, tube thoracostomy, pneumothorax, cold therapy

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## Our Experiences in Supin Percutaneous Nephrolithotomy (Pnl)

*Dursun BABA<sup>1</sup>*  
*Mustafa Kemal KAYA<sup>2</sup>*  
*Yusuf ŞENOĞLU<sup>3</sup>*  
*Alpaslan YÜKSEL<sup>4</sup>*

### Abstract

PNL is the gold standard treatment for large stone burden or staghorn stones. PNL surgery was first performed in the prone position and has continued to this day, and supine PNL has become popular, especially in the last decade. It is frequently applied with advantages such as similar success, low complication rates, and allowing retrograde intervention compared to Prone PNL. Therefore, we aimed to present the results of supine PNL cases that started to be applied in our clinic last year.

**Keywords:** Kidney, Supin pnl, urolithiasis, endourology, Stone

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## Molecular Profile of Latex Allergens and Cross-Reactivity

*Buket BAŞA AKDOĞAN<sup>1</sup>*

### Abstract

The prevalence of latex type I allergy in the general population is between 0% and 2.3%, serological examination is highly recommended for diagnosis; Various latex allergens responsible for latex-fruit-pollen cross-reactivity are discussed, such as Hev b 2 , Hev b 6.02 Hev b 7 , Hev b 8. The aim of the study was to determine the molecular profile and evaluate cross-reactivity in latex-sensitive patients.

941 patients examined with ALEX2 molecular multiplex test were included in the study.

Data of 941 patients were analyzed. A total of 46 (4.8%) patients had latex positivity. The most common latex allergens are Hev b 8- 31(67.4%), Hev b 3-10(21.7%), Hev b 5-1(2.2%) Hev b 11-7(15.2%) Hev b 6.02-6(13%), Hev b1-6(13%). The most common allergen was found to be Hev b 8. In 25 of our Hev b 8 susceptible patients, 80% were found to be pollen sensitive. Eight Hev b 8 positive patients presented with food allergy. One patient with Hev b 5 positive was monosensitized. Other latex allergens were negative, betv2, ole2 and phl p12 were negative. One of our cases who presented with anaphylaxis was hev b1 and hev b3 positive.

It is useful for scanning in multiplex system and for diagnosis of latex allergy. It helps to distinguish sensitivity from cross-reactivity. Hev b 8 sensitization in pollen-sensitive patients is mostly of no clinical significance and results from cross-sensitivity to pollen allergens (Phl p 1-12).

**Keywords:** latex, molecular diagnosis, cross-reactivity, CRD

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## Clinical and Biochemical Evaluation of Patients with Hypoparathyroidism: A Single Center Experience

Özlem DOĞAN<sup>1</sup>

### Abstract

Hypoparathyroidism is caused to low calcium levels due to parathormone deficiency that is often associated with surgery. In addition, autoimmune diseases, radiation, infiltrative diseases can also lead to hypoparathyroidism. Active vitamin D and calcium supplements are used in the treatment. In this study, it was aimed to evaluate the clinical and biochemical features of our clinics patients with hypoparathyroidism. The study was designed as a retrospective observational study. Cases with a diagnosis of hypoparathyroidism who applied to our clinic between 2019 and 2022 were included in the study. Statistical analysis was done with SPSS 29. 41 patients were included in the study. The median age was 50 (range, 34-72) years. 34 (82.9%) of the patients were female. The most common cause of hypoparathyroidism was a history of previous surgery (85.4%). In six (14.6%) patients, the cause of hypoparathyroidism was attributed to autoimmune causes. Four (9.8%) of the patients were symptomatic at the time of admission to the outpatient clinic. The median PTH level of the patients at the time of admission to the outpatient clinic was 9.7 pg/mL (range, 1-39), the median calcium level was 8.5 mg/dL (range, 5.3-9.9), and the median phosphorus level was 4.7 mg/dL (2, 8-6.3). The median vitamin D level at the time of admission to the outpatient clinic was 24.3µg/L (range, 7.1-46.7). In the final examination findings, the median calcium level was 8.7 mg/dL (6.5-9.9), and the median phosphorus level was 4.5 mg/dL (2.8-6.6). Treatment-related hypercalcemia and hypoparathyroidism-related toxicities were detected in three (7.3%) patients. **Discussion:** In this study, the clinical and biochemical characteristics of patients diagnosed with hypoparathyroidism followed in our clinic were shown. Patients with hypoparathyroidism should receive effective treatment and be followed up at regular intervals. Care should be taken against toxicities that may develop during the treatment process.

**Keywords:** hypoparathyroidism, calcium, phosphorus, parathormone, surgery

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## Major Histocompatibility Complex in Chronic Myeloid Leukemia

*Hakan İNCE<sup>1</sup>*

### Abstract

Experimental and clinical studies have shown that the system that determines Tissue Compatibility Antigens (MHC) plays the biggest role in the recognition pattern that enables people to distinguish self from non-self. CML generally shows two different clinical trends. Exposure to ionizing radiation is seen as an increasing risk factor in the formation of CML. It has been determined that the frequency of CML increases in those undergoing radiation therapy for Ankylosing Spondylitis and Cervical Cancer. Most asymptomatic patients with CML are diagnosed incidentally while other patients are being evaluated or with a daily routine physical examination. A benign course is observed in the vast majority of cases. Detection of an increase in T lymphocytes and a decrease in Leukocyte Alkaline Phosphatase (LAP) activity are some of the findings in the blood.

In humans, the system encoding tissue antigens (MHC), called HLA (Human Leukocyte Antigens), contains genes that are tightly linked to each other and show genetic transition as a whole. In this study, it was aimed to determine tissue group antigens in patients diagnosed with CML at the Hematology Clinic of the DU Faculty of Medicine. In order to determine the diagnosis of CML, which was found by chance, 17 patients diagnosed with CML were enrolled in the study. Patients with an average age of 52 in men and 48 in women were included in the study. Due to the fact that Tissue Groups are observed with increasing frequency in cases with CML, the idea that there is a predisposition to this leukemia has emerged, we tried to determine which type is present in these patients. As in similar cases, in our study, it was determined at a higher rate compared to HLA-Cw3 and HLA-A2.

**Keywords** - Chronic Myeloid Leukemia; MHC;HLA

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## Factors Affecting Perioperative Mortality in Esophageal Cancers

*Mertay BORAN<sup>1</sup>*

*İlker ÖKTEN<sup>2</sup>*

### Abstract

Esophagectomy is considered as one of the most invasive and complex surgeries with high postoperative morbidity and mortality rates. Despite significant advances in preoperative risk assessment, surgical techniques, and postoperative intensive care follow-up, mortality rates after esophageal cancer resections are still high. In this study, it was aimed to determine the preoperative, intraoperative and postoperative factors affecting perioperative mortality in esophageal cancer.

Patients who underwent esophagectomy for middle and lower esophageal cancer in the thoracic surgery department between January 2000 and December 2006 were evaluated retrospectively. The effect of pre-, intra- and postoperative and some tumor-related factors on perioperative mortality was evaluated using univariate and multivariate analysis.

The study included 115 patients (age  $59.3 \pm 11.6$ ). The perioperative mortality (PM) rate was 14.3%. The determining factors for PM in univariate analyzes were smoking ( $p=0.05$ ), diabetes mellitus ( $p=0.05$ ), resection type ( $p=0.019$ ), reconstruction organ ( $p=0.024$ ), postoperative transfusion ( $p=0.04$ ), presence and number of general complications ( $p < 0.0001$ ). Postoperative transfusion was an independent predictor of PM.

Less need for postoperative transfusion may be a sign of a good intraoperative hemodynamic follow-up and less intraoperative trauma secondary to surgical technique. Careful preoperative evaluation, intraoperative follow-up, and improved surgical experience can reduce PM. Prospective and controlled studies for this cancer may make the results more reliable.

**Keywords:** Mortality, Esophageal cancer, Esophagectomy, Postoperative complications

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## Bioinformatics Analysis of ANGPTL4 Mediating Inactivation of Lipoprotein Lipase LPL

*Ertuğrul BİLİR<sup>1</sup>*

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*Nehir ÖZDEMİR ÖZGENTÜRK<sup>4</sup>*

### Abstract

The observed increase in the number of obese individuals shows that obesity is the disease of the age. Obesity, known to affect more than 2 billion people and is affected by many environmental and genetic factors, still does not have a definitive treatment today. Numerous studies have been conducted on mechanisms that can cause obesity to treat this disease.

There are several mechanisms that include regulation of the ANGPTL4 expression, an inhibitor of an enzyme (LPL) responsible for the digestion of lipoproteins in the blood. Any change that may affect the regulation of ANGPTL4 may lead to obesity by disrupting the functions of the LPL enzyme in fat metabolism. Clarifying the relationship of ANGPTL4 with obesity is of great importance in understanding protein's effects on obesity. In this study, bioinformatics analyses were carried out to better identify the ANGPTL4 protein in general. Various bioinformatics tools were used while performing these analyses, and these tools were used for gene, protein, and mutation analyses of ANGPTL4.

In the results obtained from the analyses, it was seen that possible mutations in some amino acid positions, which were not found to be effective in the evolutionary conservation of ANGPTL4, are essential for protein structure and functions, although they are in un-conserved regions. In other analyses conducted on mutations, the effects of mutations on protein stability, the protein's biological function, and the protein's physical and chemical properties were investigated.

This study is a preliminary study for the future findings on ANGPTL4, and it is thought that it may help to investigate the effects of ANGPTL4 on obesity.

**Keywords:** Obesity, LPL, ANGPTL4, bioinformatics, in silico analysis

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## Problems in Transplant Pregnancy: A Case Report

Başak BOYNUEĞRİ<sup>1</sup>

### Abstract

Women of childbearing age with renal insufficiency, gonadal dysfunction and fertility improve after renal transplantation. Pregnancies occurring 1 year after transplantation are considered safe with stable allograft function, no rejection in the last 1 year, and the immunosuppressive drugs used, maintained at a stable dose. However, it shouldn't be forgotten that complications such as premature birth, low birth weight, allograft dysfunction, hypertension and preeclampsia may occur in fetus and mother with transplantation are at a considerable level. We presented the complications faced by our patient during pregnancy.

A 28-year-old woman transplanted from a cadaveric donor was allowed her pregnancy after regulating immunosuppressive medication. Pre-pregnancy creatinine level was 1.05mg/dl and proteinuria was 0.11g/day. She was normotensive. At 21<sup>st</sup> week of pregnancy, TA:140/100mmHg was detected. proteinuria was 0.09g/day, creatinine was 0.94mg/dl. Nifedipine 30mg 1x1 was started. At 24<sup>th</sup> week, proteinuria:200mg/day, creatinine:0.98mg/dl, TA: 150/100mmHg, trace pretibial edema (PTE) was present, Nifedipine was increased to 2x1. Proteinuria: 1.16 g/day, crea: 1.09 mg/dl, PTE 2+, TA: 180/100mmHg was detected in 26<sup>th</sup> week. Nifedipine was adjusted to 2x2 and methyldopa 3x1 was started. Since there was no newborn-ICU in our hospital, patient was transferred. Because of the increase in proteinuria and deterioration of renal functions, PRA was sent considering rejection. Class I and II positivity were detected. She was delivered by C/S when the mother's clinic deteriorated and fetal distress developed. Contusion occurred in the transplant kidney in cesarean section, it was sutured, and no serious hemorrhage was detected. After she was stabilized, she was referred to our center. On Doppler ultrasound, kidney size:140x77, parenchyma: 20mm, and a contusion area of 3 cm was detected. As the renal values was improved, renal biopsy was discontinued. At the last follow-up her creatinine was 1.2mg/dl, proteinuria was 360mg/day, PRA: Class I (-) was detected. For the contusion at birth, DMSA was withdrawn but no scar was observed.

Hypertension, proteinuria, high creatinine levels are findings that can be encountered in preeclampsia and acute rejection and can create diagnostic dilemmas. When evaluated incorrectly, it causes results such as premature/stillbirth, graft loss. Diagnosis, clinical evaluation and outcomes in these pregnancies remain unclear. The frequency of cesarean in transplanted pregnant women frequently reveals operative risks associated with abdominal surgery. While presenting our case, our aim was to draw attention to such mistakes, and to discuss standard approach recommendations aimed at minimizing harm and increasing patient safety.

**Keywords:** pregnancy, kidney transplantation, preeclampsia, proteinuria

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## Does Hypertension Develop in Children Patients Who Underwent Pyeloplasty due to Unilateral Ureteropelvic Junction Stenosis?

*Derya YAYLA<sup>1</sup>*

### Abstract

Hypertension may develop in children with renal and cardiovascular pathologies. In our study, we aimed to investigate the prevalence of hypertension in children who underwent pyeloplasty.

We retrospectively evaluated the blood pressure values measured in the postoperative period in children who were diagnosed with ureteropelvic junction stenosis and underwent pyeloplasty in the pediatric urology clinic of Ankara city hospital between 2007 and 2020.

In our study, 167 patients (48 women, 123 men; mean age 3.6; 58 right, 109 left) who underwent pyeloplasty due to UPJO were evaluated. In the postoperative follow-up, hypertension was detected in 5 patients (2.9%). Bilateral patients were excluded from the study. Of the 5 patients who developed hypertension, one had a pelvic ectopic kidney and one had a contralateral multicystic dysplastic kidney. All of the patients who developed hypertension had intrinsic UPBO; 3 of them were catheterized with a percutaneous nephrostomy catheter preoperatively. The mean MAG3 function was 43.3%. While the mean follow-up period of the patients was 5.6 years, it was observed that hypertension developed in an average of 3.5 years. In the postoperative period, there was an average increase of 1.2% in the functions of these five patients in the control scintigraphy. No patient who developed hypertension underwent a second surgical intervention.

In cases where Pyeloplasty was performed due to UPJO, blood pressure should be monitored in the postoperative period. Blood pressure should be checked, especially in advanced hydronephrotic patients with a history of percutaneous nephrostomy in the preoperative period.

**Keywords:** Ureteropelvic junction obstruction, hypertension, pyeloplasty, percutaneous nephrostomy

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## Comparison of Doppler Ultrasonographic Measurements of Anterior Cerebral Artery Blood Flows in Premature Infants Whose Support with Mechanical Ventilator Treatment

Burak CERAN<sup>1</sup>

Esra BEŞER<sup>2</sup>

### Abstract

This study aims to compare anterior cerebral artery (ACA) flow velocities, pulsatility index (PI) and resistivity index (RI) in the first 72 hours of life in preterm newborns receiving invasive or non-invasive respiratory support with mechanical ventilation (MV) with the control group.

Premature infants followed in the neonatal intensive care unit without intracranial pathology were included in this study. ACA minimum (Vmin), maximum (Vmax), end-diastolic (Ved) flow rates, PI and RI values were measured by transcranial Doppler (TCD) ultrasonographic imaging by the neonatologist after providing hemodynamic stability between the first 24-72 hours after birth. Demographic data were recorded from the patient file.

A total of 60 premature infants (male 27, female 33) were included in the study. The patients were divided into 3 groups according to their respiratory support status. The median values of gestational week of non-invasive MV (n=28), invasive MV (n= 18) and control (n=14) groups without respiratory support were 30 (28-31), 26 (25-27) and 32 (31-34) weeks, respectively. PI measurements of non-invasive MV, invasive MV and control group; RI measurements were  $1.58 \pm 0.42$ ,  $1.73 \pm 0.3$  and  $1.48 \pm 0.3$ , respectively;  $0.77 \pm 0.07$ ,  $0.81 \pm 0.08$  and  $0.75 \pm 0.07$ , respectively. In the Anova analysis, while there was no significant difference between the groups regarding PI values ( $p=0.98$ ), a statistically significant difference was found between the RI values ( $p=0.008$ ).

**Conclusion:** Measurement of cerebral blood flow in premature infants with TCD provides essential information about the changes in cerebral perfusion in newborns. Knowing the differences in ACA in newborns receiving different respiratory support is vital to understanding the effects of treatments and interventions.

**Keywords:** Premature, Anterior cerebral artery, Doppler ultrasonography, Mechanical ventilator

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# International Congress of Medical and Health Sciences Studies

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## Measures Against Chemical, Biological, Radiological and Nuclear (Cbrn) Threats in the Perspective of Environmental Problems: The Case Of Health Facilities

Hayriye SAĞIR<sup>1</sup>  
Kymet ÇAKIR<sup>2</sup>

### Abstract

It is of great importance to protect the natural environment so that people can live in a better quality within the framework of their living standards. It is the indispensable desire of all humanity to live in a more livable, undamaged and natural world, both in terms of health and socio-economic and psychological aspects.

Today, the most important issue in environmental pollution, which is a serious danger to all living and non-living beings, besides affecting human health negatively; is the pollution of the world's biological environment by various chemical compounds. Cleaning agents, detergents, toxic chemical wastes, pesticides used in agriculture, pesticides, which are frequently used in daily life, threaten the life of living creatures in seas, lakes and rivers and even have the danger of completely destroying life.

Although the elements that threaten the earth are primarily natural disasters such as earthquakes, floods, avalanches, landslides and fires, industrialization, technology and human-induced disasters can also be mentioned. The most important of these is that Chemical, Biological, Radioactive and Nuclear (CBRN) agents carry a high risk for humans. Serious studies and precautions are taken in case of exposure to CBRN agents in disaster management, both in order to protect human health and prevent possible diseases and loss of life, and to protect the environment.

The aim of this study is to evaluate the importance of CBRN events that cause serious environmental damage in terms of Health Facilities. In the study, which includes CBRN agents that cause soil, water and air pollution, especially mass deaths and diseases, in detail, the environmental and ecological balance issues are tried to be explained conceptually. Especially, the regulations made in practice about CBRN units in Health Facilities are mentioned.

**Keywords:** Crisis and Disaster management, Environmental Pollution, CBRN Units, Chemical Biological, Radioactive and Nuclear Threats

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## Retrospective Analysis of Laboratory Panic Value Reports for Ethanol Testing

*Gamze GÖK<sup>1</sup>*

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*Turan TURHAN<sup>3</sup>*

### Abstract

Ethanol is a public health problem that can be abused and cause intoxication. Ethanol is one of the most used addictive substances in the world. The depressing effect of ethanol on the body is dose-dependent; ethanol depresses the central nervous system at low doses; it has a generally depressing effect at high doses. When the blood ethyl alcohol level exceeds 300 mg/dL, deaths may occur as a result of alcohol poisoning. The Laboratory Panic Value was defined by Lundberg as “a laboratory test result that represents a life-threatening, pathophysiological condition”. Reporting panic reports is one of the main elements of accreditation and quality standards of many international organizations. International Standards Organization (ISO) 15189:2012 accepted the immediate notification of laboratory panic value. Our study is retrospective, approval was obtained from the ethics committee of our hospital. (E2-22-2772 ) (09/11/2022). In our study, the results of the panic values of the ethanol test from 01.09.2021 to 01.09.2022 were obtained from the information system of our hospital to contribute to patient safety. A total of 47 panic notifications were made for the ethanol test within the specified date ranges. The percentage of laboratory panic value according to all biochemistry laboratory panic values of the ethanol test is 0.0005. We think that the data obtained from our study can contribute to the laboratory management and development of other similar institutions, draw attention to ethanol toxicity, and contribute to patient safety at the same time.

**Keywords:** Ethanol, Panic Value, Laboratory Information System

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## Intermittent Tdm-1 Treatment in Her2 Positive Metastatic Breast Cancer: Case Report

*Periban Perkin<sup>1</sup>*

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### Abstract

Human epidermal growth factor receptor 2 (HER2) positive breast cancer historically associated with worse prognosis but combination of new anti-HER2 drugs and chemotherapy improves survival. Trastuzumab emtansine (TDM-1) is an antibody drug conjugate used in HER2 positive metastatic breast cancer. Although there is no data on the intermittent use of anti-HER2 agents in the literature we presented our case who received TDM-1 intermittently due to the problem of drug availability. A 50-year-old woman whose biopsy result was invasive carcinoma from a left breast mass, hormone receptor and HER2 score were unknown, was given 4 cycle of neoadjuvant chemotherapy in Sudan. Pathological stage was ypT4N2M0, estrogen receptor (ER) negative, progesterone receptor (PR) 1% positive, Her2 score 3+, ki 67 40%, adjuvant trastuzumab, tamoxifen, and radiotherapy were planned. Six months later a new mass on the contralateral breast diagnosed ER (-), PR (-), and her2 score (3+) invasive carcinoma. Neoadjuvant treatment was planned for the contralateral breast by adding paclitaxel to trastuzumab treatment. MRM could not be performed because of patient preference. In May 2019 she had progression and clinical N3 disease, vinorelbine and trastuzumab treatment started. After three cycle mediastinal lymph node and lung metastases detected and TDM-1 started in October 2019. The patient interrupted her treatment for six months twice. September 2022 she had progressive disease. PFS with TDM-1 was 35 months despite intermittent use for 22 months. Due to the increased cumulative toxicity (especially cardiac toxicity) with long-term therapy, the increased cost, and the difficulties of receiving continuous parenteral therapy; Prospective studies are needed on how long to continue anti-her2 agents in patients with good response, or on “stop and go” approaches as shown in colon cancer.

**Keywords:** HER2 positive metastatic breast cancer, TDM-1, intermittent TDM-1

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## Clinical Manifestations of Celiac Disease in Children; single Center Experience

*Semih SANDAL<sup>1</sup>*

### Abstract

Celiac disease (CD) is a common immune-mediated inflammatory disease of the small intestine caused by sensitivity to dietary gluten in genetically predisposed individuals.

The aim of the study is to investigate the clinical manifestations and concomitant diseases of CD in children.

This study was performed in the Department of Pediatric Gastroenterology, Ankara Training and Research Hospital between February 2021 and October 2022. 42 patients with celiac disease, 22 female (52.3%), were included in the study.

The mean age of the 42 patients was  $10.2 \pm 3.75$  years. 42.8 % of all patients have presented with non gastrointestinal (GI) symptoms. The most common GI symptoms were abdominal pain-bloating and diarrhea (14.2%), constipation (9.5%) respectively. Iron deficiency anemia (11.9%), short stature (4.7%), vitamin B12 deficiency (4.7%), chronic urticaria (11.9%) were the most non GI celiac presentation.

CD should also be kept in mind in the differential diagnosis of patients presenting with abdominal pain, transaminase elevation, anemia, etc., for the normal completion of mental and physical development, especially in the childhood age group.

**Keywords:** Celiac disease, clinical manifestations, children

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## Trauma and Psychological First Aid: The Importance of the Nurse

*Nesibe GÜNAY MOLU<sup>1</sup>*

### Abstract

Trauma is defined as conditions that affect the individual physically or psychologically in different way. It is a situation that cannot be isolated from human life and requires learning to live. While events that affect the majority of the society, especially natural disasters, cause mental disorders in some individuals who are traumatized/affected, some individuals do not develop any mental disorders due to individual differences. First intervention is important for the prevention of trauma-related mental disorders. Effective measures are required to reduce the mental distress caused by negative effects such as fear, helplessness and stress in the traumatized individual. The traumatized individual should be effectively supported psychosocially. Psychological first aid (PFA) emerges as the first step of psychosocial support applied to reduce the risk of mental disorders and increase resilience after the traumatic event. A guide titled "Psychological first aid: Guide for field workers" was published by the World Health Organization in 2011 and the principles of psychological first aid were explained in detail in this guide. Psychological first aid, which adopts the principles of watch, listen and connect, can be applied by individuals who have received training who are likely to intervene in trauma. Usually within the response team; psychologists, nurses, social workers, firefighters and rescue professionals. Due to their education and experience, nurses can act as leaders at the scene of trauma and during the intervention, identify the urgent and basic needs of individuals and operate the appropriate nursing process. Nurses assist both the traumatized individual and the responding team. The importance of intervention (psychological first aid) to the traumatized individual is emphasized and it is important to train the team that can intervene in this regard and to work in a multidisciplinary manner.

**Keywords:** Trauma, Psychological first aid, Nursing process

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## Overview of Celiac Disease

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### Abstract

Celiac disease (CH) is a chronic intestinal disease caused by gluten intolerance. It is a disease characterized by immune-mediated enteropathy associated with poor digestion and absorption of many nutrients and vitamins. The disease occurs when predisposed individuals consume gluten-containing foods such as wheat and wheat, and rye-containing foods, and the jejunal mucosa infiltrating with lymphocytes is induced. The main symptoms of celiac disease consist of malabsorption symptoms such as stomach pain, gas and bloating, diarrhea, and weight loss.

Since celiac disease can be asymptomatic, most people cannot be diagnosed and may show atypical symptoms. Also, severe inflammation of the small intestine can occur without any symptoms of gastrointestinal disease. Diagnosis requires endoscopy with jejunal biopsy. In addition, since there are other diseases that can mimic CD, it is important to confirm the diagnosis with tissue transglutaminase antibodies.

Although the exact cause of celiac disease is unknown, it is thought to be primarily caused by the immune system (tissue-transglutaminase auto antigen). There is also a genetic predisposition.

In the treatment of the disease, important clinical and histological results can be achieved with lifelong restriction of dietary gluten intake. However, it may take years to achieve permanent histological correction.

Disease name and synonyms

Celiac disease, Celiac sprue, non-tropical sprue, gluten sensitive enteropathy, idiopathic steatorrhea

**Keywords:** celiac, gluten, enteropathy

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## Early Recover Practices in Cesarean Delivery

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### Abstract

Enhanced Recovery After Surgery (ERAS) protocols aim to provide early recovery of patients after surgery. The components of the ERAS practices are a care model that starts at the polyclinic and ends with discharge, is based on evidence-based practices, and includes all aspects of patient care. ERAS protocols are trying to improve their practices by continuously investigating the situations that affect the early recovery of patients.

ERAS protocols were originally created for patients undergoing colorectal surgery, and were later expanded to include other clinical fields. One of these fields is obstetric surgery. ERAS practice guidelines for cesarean delivery were created in 2018. ERAS components practiced in cesarean deliveries aim to standardize care for women planned for cesarean section and to improve maternal fetal outcomes. This situation that cesarean delivery requires a longer hospital stay and different risks compared to normal delivery has made it necessary to use ERAS practices in cesarean section.

ERAS practices in cesarean delivery are essential teamwork and significantly reduce the workload of nurses, who are members of this team. Maternal-fetal benefits and cost-reducing effects of ERAS practices in cesarean delivery have also been demonstrated. ERAS practice guidelines for cesarean delivery have only recently been constituted, so they have insufficient or low level of evidence components. More work is needed to develop these components.

**Keywords:** ERAS protocols, cesarean delivery, early recovery, surgery, obstetrics

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