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**SCIENTIFIC
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TRUST THE PROFESSIONALS

20 May, 2022



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INTRODUCION

Aldent University, supported by the Scientific Committee and the Organizing Committee, is pleased to welcome you to the VIth Scientific Conference, held in Tirana, on the 20th of May, 2022.

This conference aims to bring together lecturers and students of several fields, in order to present themes responsibly and efficiently. The conference is an interdisciplinary platform to provide a powerful environment for research findings and technological innovation.

The VIth Scientific Conference is divided into four sessions respectively:

1. Session of Pharmaceutical Sciences,
2. Session of Dental Sciences,
3. Session of Nursing and Physiotherapy,
4. Session of Technical Medical Laboratory and Imaging.

In this book of abstracts are published 27 scientific papers and research studies done professionally by lecturers and students led by academic staff.

These summaries address various topics such as: Patients' knowledge on the use of antibiotics, new formulations and adverse drug reactions, new techniques in the treatment of dental diseases, nursing care, the consequences of vitamin D deficiency in the body, etc.

The management staff of Aldent University wishes you successful work in the VIth Scientific Conference.

Dr. Lorena Memushaj

Lecturer at the Department of Pharmacy.

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A. SESSION OF PHARMACEUTICAL SCIENCES

Abstracts

IODINE STATUS OF WOMEN IN REPRODUCTIVE AGE OF DURRES CITY

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Introduction: Iodine, a micronutrient that plays a pivotal role in thyroid hormone synthesis, is essential for proper health at all life stages. Indeed, an insufficient iodine intake may determine a thyroid dysfunction also with goiter, or it may be associated to clinical features such as stunted growth and mental retardation, referred as iodine deficiency disorders (IDDs). Iodine deficiency and related disorders are still a public health problem that affects most countries, including industrialized and developing regions. Measurement of iodine in urine is the most sensitive indicator of current iodine intake because more than 90% of dietary iodine is excreted in the urine.

Methods: We have carried out a survey on 85 urine samples randomly collected in women of reproductive age living in Durres City. The purpose of this survey was measurement of iodine levels in women of reproductive age of Durres City. Urine samples are collected in plastic bottles and were storage in refrigerator before analysis. Iodine content were determined by colorimetric method.

Statistical processing of results in done by statistical package MedCalc 10.

Results: According to this survey 32.94% of women suffer severe iodine deficiency, 48.23% moderate iodine deficiency and 18.82% mild iodine deficiency.

Conclusions: The results of this survey have shown that women in reproductive age in Durres City are iodine deficient.

Key word: Iodine, Iodine deficiency, Iodine status, Women of reproductive age, Urinary iodine.

ADVERSE DRUG REACTIONS ASSOCIATED WITH FIRST-LINE ANTI-TUBERCULOSIS DRUG REGIMENS

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Introduction: Tuberculosis (TB) has been a common chronic infectious disease in human communities. Besides disease-related complications, there could be serious adverse reactions due to anti-tuberculosis (anti-TB) drug therapy. The aim of this survey was to assess the incidence and severity of adverse drug reactions (ADRs) induced by first generation of anti-TB drugs, as

well as the drug interactions.

Methods: We carried out a retrospective cross-sectional survey based on 106 hospitalized patients files. Socio-demographic data, medical history of patients and drugs used to treat tuberculosis were collected by using a questionnaire. Data on adverse drug reactions were collected from the patients files, whereas data on drug interactions were collected by processing with Medscape Drug interaction checker. Statistical processing of results was done by MedCalc 10.

Results: Among 106 patients admitted, there were 26 patients (24.52%%) with ADRs induced by first line of anti-TB drugs. Obtained results have shown that ADRs were developed in 9.09% of female and 25.00% in males patients included in our survey. According to this survey the gastro-intestinal system were more affected by ADRs, whereas the hepatobiliar and musculoskeletal system were less affected. Regarding severity of the interactions 52.38% were minor, 38.09% moderate and 9.52% severe. 8.57% of interactions were pharmacodynamic, 61.90% pharmacokinetic and 9.52% of unknown origin.

Conclusion: Anti-TB drugs could cause severe and frequent adverse effects. Male patients should be considered as high risk group. Majority of drug interactions were minor. Natyre of interactions was mainly pharmacokinetic.

Key words: adverse drug reaction; tuberculosis; hospitalized patients; severity; drug interactions.

DYSLIPEDEMIA CONTROL BY USING FOOD SUPPLEMENT OXICOL

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Introduction: Dyslipidemia is a strong predictor and pathogenic factor for cardiovascular diseases and contributes to the development of coronary graft atherosclerosis occlusion. There is a real relationship between lowering the blood cholesterol level and the incidence of these diseases.

The characteristic features of dyslipidemia are a high plasma triglyceride concentration, low HDL cholesterol concentration and increased concentration of small dense LDL-cholesterol particles.. The availability of multiple lipid-lowering drugs and supplements provides new opportunities for patients to achieve target lipid levels. The levels of cholesterol in body can be increased due to factors such as genetic predisposition, the action of free radicals, the increase in the consumption of low quality fats in our diet, the growing sedentary lifestyle or smoking.

Many albanian patients use statin for prevention from cardiovascular problems and mortality. However, local data on the effectiveness and safety of statin therapy are very scanty.

Methods: 100 persons of both sexes underwent the clinical trial taking for three consecutive months one Oxicol capsule per day. Indices of dyslipidemia, as low density of lipoprotein, high density lipoprotein, triglycerides and total cholesterol, were analyzed before beginning the clinical trial and after 3 months of it. The aim of this survey was to highlight the reduction of dyslipidemia indicators as a result of the use of the dietary supplement Oxicol for three consecutive months. Statistical processing of results in done by statistical package MedCalc 10

Results: Data obtained from this survey have shown that after three months levels of total cholesterol was reduced 25.5 %, levels of triglycerides was reduced 24.5 %, levels of low density lipoprotein was reduced 23.4 % and levels of high density lipoprotein were increased 21% .

Conclusions: Use of Oxicol have impaired the indicators of dyslipidemia.

Keywords: dislipidemia, cholesterol, triglicerides, LDL, HDL, Oxicol.

BODY MASS INDEX AND HYPERTENSION

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Introduction: Obesity is a complex, multi-factorial chronic disease, which is defined as excess body fat. In recent years, the prevalence of obesity has increased dramatically in many countries. Obesity is defined as an excess of adipose tissue, and is associated with an increased chronic diseases as diabetes mellitus, hypertension, or cancer and associated as well as mortality rate. Thus, the body fat and in particular the fat distribution are used as indicators of risk for the health. The aim of this study was to assess the relationship between obesity and hypertension in the young adult population living in Tirana City.

Methods: We conducted a cross-sectional study based on a sample of 120 young adults, men and women, by measuring Body Mass Index (BMI), as well as sistolic and diastolic blood pressure. Statistical processing of results in done by statistical package MedCalc 10.

Results: According to this study 44.17% of the subjects have BMI normal, 50 % were overweight and 5.83% were obese , where as regarding the prevalence of hypertension the results have shown the value of 11.54%, 93.44% and 100% respectively. For both sexes, all variables were significantly higher with the upper thresholds.

Conclusions: This study showed a correlation between obesity and hypertension in young adults in Tirana City. The increase in sistolic and diastolic blood pressure associated to obesity indexes, confirmed the fact that it's the fat that would be involved in the association between obesity and hypertension.

Key words: Body mass index, hypertension, blood pressure, overweight, obese.

STUDY OF THE USE OF ANTIBIOTICS

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Introduction: Antibiotics are drugs that help stop infections caused by bacteria. They do this by killing the bacteria or keeping them from copying or reproducing themselves. The word antibiotic means "against life". Any herb or drug that kills bacteria is an antibiotic. But most people use the term when talking about the herbs or drugs that is meant to kill bacteria.

The purpose of this study was to evaluate the use of antibiotics and some criteria for their use such as the most used antibiotic, number of prescriptions with antibiotics, dosage forms used, etc.

Materials and methods: To carry out this study, data were collected from 105 prescriptions in pharmacies in the city of Peshkopi - Dibër. The data were listed in the table by ordering them according to the ordinal number. The class of each antibiotic mentioned was specified, the number of prescription drugs and the number of antibiotics per prescription were recorded, as well as the dosage form used. The data were processed in microsoft excel and presented in tables and graphs as follows.

Results and Discussions: In the study conducted on 105 medical prescriptions the antibiotics prescribed by doctors in medical prescriptions were analyzed. We note that the most prescribed antibiotics by doctors in the group of penicillins and β -lactamics are Cefaclor and Ceftriaxone respectively with 11 prescriptions (17%) for each antibiotic while the least prescribed antibiotics are: Ampicillin, Cefazoline, Cefpodoxime with 1 prescription each (1%)

Conclusions: The study showed us that the use of antibiotics is a multifactorial behavior formed by demographic, individual (knowledge and attitude) and organizational factors. There should be a special emphasis on the implementation of guidelines and laws when prescribing and distributing antibiotics.

Key words: Antibiotics, medical prescriptions, drugs, diagnosis.

PROBIOTIC FOODS, NUTRITIONAL PROPERTIES AND THEIR IMPORTANCE IN OUR BODY.

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Introduction: Probiotics are live microbes that can be included into a variety of products, including foods, pharmaceuticals, and nutritional supplements. Probiotics are most typically *Lactobacillus* and *Bifidobacterium* species, but the yeast *Saccharomyces cerevisiae*, as well as some *E. coli* and *Bacillus* species, are also employed. However, the word "probiotic" should only be applied to live microbes that have been demonstrated to have a health benefit especially in the intestinal tract.

Materials and methods: In order to have a more detailed information on the fact that the effects of probiotics and prebiotics are known in our country, a study was conducted based on the survey of 130 people of different age groups. The study aimed to obtain information on how well known the beneficial effects of probiotics are, but also on how can take them, as well as the main sources from where they come from.

Results and Discussions: Participants were asked what they thought about the consistency of probiotics and the result was that only 56.1% of them thought they were live microbes, the rest thought they were chemical compounds or synthesized drugs. 68.5% of participants consumed yogurt as the main source of probiotics in a nutritious diet and 87.8% of respondents think that the best way to get probiotics is through food and drink, while the rest think that food supplements would be the best way to get probiotics in order to get them in the required amount at the right time.

Conclusions: We have noticed that the general population has little information on probiotics and prebiotics, this has made people reluctant to take them in pharmaceutical forms or take them through food.

Key words: probiotic, prebiotic, *Lactobacillus*, *Bifidobacterium*, food.

INFECTIOUS DISEASES IN THE CITY OF KORCA AND THE ROLE OF THE PHARMACEUTICAL SERVICE

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Introduction: Infectious diseases, a major problem nowadays.

Infectious diseases are disorders caused by microorganisms that live in the human body. These are usually harmless but also beneficial to health; in other circumstances they cause contagious diseases.

Materials and methods: In order to understand how these infectious diseases spread so quickly and to analyze the spread of morbidity in the city of Korca, we studied the number of visits or hospitalizations in the city hospital and the analysis performed in the last three years.

Results and discussions: We have noticed that the most common infectious diseases in this county are: typhoid, primary syphilis, Covid 19, hepatitis. From this study the most affected age was 60/64 years old and the male gender prevailed. We studied the treatment protocols according to the diseases, taking into consideration the cooperation of the health and pharmaceutical service that helped in the treatment of these diseases.

Conclusions: The comparative figures of contagious diseases in the city of Korca resulted to be the same as those of the whole country, the readiness of the medical and pharmaceutical service made the loss of lives to be small.

Key words: Infectious diseases, covid19, syphilis

B. SESSION OF DENTAL SCIENCES

Abstracts

SEALANTS IN CARIES PREVENTION" (LITERATURE REVIEW)

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Introduction: Sealants are thin coatings, composed of light-colored resin-based material. They are placed on the surface of the teeth not decayed mainly those of premolars and molars. Sealants are suitable for all children who are sensitive to cavities or for those who find it difficult to brush their teeth properly. Children between the ages of 6 and 14 are more likely to put sealants, especially on their premolars and molars. This is because the occlusal and proximal surfaces of these teeth can easily become home to bacteria, food and plaque accumulation leading to dental caries.

Purpose: To reduce the risk of caries, especially in molars, with the use of sealants. To highlight the effectiveness of the use of sealants. To show that sealants are safe and to explain the different types of them.

Materials and methods: For the material of this presentation have been used, various literature sources, scientific references and various websites as well as medical books.

Conclusions: The success that determines the residence of sealants on the chewing surface depends on the clinical conditions at the time of their use. The maintenance of a dry environment determines their retention, as well as the duration of their stay in the fissures of premolars and molars. Evaluation of the clinical retention of sealants is essential for the prevention of caries. Thanks to their adhesion sealants play the role of a physical barrier in the oral cavity.

Keywords: Prevention, Sealants, caries, fissures, premolars, molar.

POSTEXTRACTIVE IMPLANTS -CASE REPORTS

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Purpose: To evaluate the clinical outcomes and efficiency of postextractive implants in posterior regions of upper and lower jaw.

Methods and Materials: Postextractive implants are applied in 3 clinical cases , using bone grafts and resorbable membranes. Clinical and imageric parameters are recorded to assess the treatment outcomes. Criterias of hard and soft peri-implantar tissues and osteointegration of implants are evaluated.

Results; Postextractive implants are successfully integrated for a period of time 6-8 months. No recessions of peri-implantar of soft tissues are recorded.

Conclusions: Based on the scientific reports and the limited data of our report cases, postextractive implants are efficient and the clinical outcomes are similar with implants in healed alveolar ridges,.Evaluation of risk indicators like soft and hard tissue defects and the angulation of the implants during osteotomies is the key factor for the success rate of the postextractive implants.

Keywords: Implant, post-extractive, osseointegration, stability.

AESTHETIC THERAPY OF PERMANENT TEETH IN ADOLESCENTS

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Introduction: Aesthetic dentistry can help kids and their parents get the beautiful smile they desire. During the adolescence, a delicate and transitional stage of physical and psychological development to new environmental and psychological structures, some elements of appearance and, more specifically, dental aesthetics have great importance for the adolescent's self-image and self-esteem. However, at these ages, how individuals see themselves is a critical aspect in their development, social life, and psychological well-being. Dental agenesis is a term referred to the absence of one or more tooth and which, in permanent teeth, is a congenital anomaly that is frequently seen in humans.

Materials and methods: We used: Pediatric Dentistry, an aesthetic treatment performed by Gregory Camaleonte in 2018 and Style Italiano for the realization of this topic.

Conclusions: In terms of social and psychological development, restoring a teenager's smile is a crucial component.

Key words: aesthetic, smile, treatment.

MECHANICAL AND CHEMICAL PROCESSING DURING THE TREATMENT OF CHRONIC PERIODONTITIS IN ONE SESSION. LITERATURE REVIEW.

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Introduction: Chronic apical periodontitis is a common endodontic pathology, mainly provoked by untreated caries. Cases of traumatic, periodontal and chemical periodontitis are not excluded. The pulp from the vital is gradually necrotized by transforming the canal into a community of amorphous debris and countless microorganisms. The last ones mentioned, in time expect the canal system, also make an occupation in the periapical space. To restore the tooth to normal, we applied its treatment with hand limes and Ni-Ti of the rotary system alternated with rinsing the canal with Sodium Hypochlorite solution 5.25% and using EDTA gel 17%. In this way, the sufficient expansion of the canal system to the apical strictures has been realized, a narrow position whose position we have defined in advance by means of radiography, apex locator, tooth length tables, digital sensitivity. Treatment in this sufficiently enlarged canal, cleaned and disinfected in this way creates conditions, for its completion with one session, leaving the place of filling with lateral condensation. The short-term and long-term results are impressive and we are exposing a considerable number of pre-treatment and post-treatment radiographs.

Materials and methods: Have been taken 64 cases in treatment and 20 of them will be exposed. The treatment technique is dominated by the expansion of the canal with rotary Ni-Ti instruments according to the hybrid variant between step back and crown down which is called the standard method. Radiographs, diagnosis, cavity preparation, work length measurement, canal widening and processing. Number of dental cases with chronic periodontitis received in medication.

Results and Discussions: One-session treatment is 80-85% successful.

Conclusions: The success of the treatment justifies the treatment with one session.

Keywords: Chronic Periodontitis, Sodium Hypochlorite, Apical Strictures, One Session Treatment, Rotatory Instruments Ni-Ti.

DIABETES AND ITS INFLUENCE ON PERIODONTAL DISEASE

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The periodontium is a complex structure consisting of four components: the gingiva, the cementum, the periodontal ligament, and the alveolar bone. The functions of the periodontium include supporting the tooth in the bone, creating a protective barrier for the tooth from the oral microflora enabling the tooth to attach to the bone.

Periodontal disease is the result of infection and inflammation of the gums and the bone that surrounds the tooth. The stages of periodontal disease are divided into two main groups: gingivitis which includes inflammation of the gums and periodontitis, where we have damage to periodontal fibers, loss of attachment and loss of alveolar bone around the tooth.

Diabetes is a disorder in which the body, specifically pancreas, does not produce enough insulin or does not respond to it as usual, causing abnormal rise of glucose level in blood.

Purpose: To understand the mutual relationship between diabetes and periodontal disease and to orientate the patients about the ways to treat periodontal disease and to maintain oral hygiene.

Methods and materials: To realize our topic we relied upon our “Practical Periodontics” (Kenneth Eaton), “Clinical Periodontology” (Carranza).

Results: Studies show that diabetes negatively affects periodontitis through some ways, where we can mention:

1. Diabetes causes blood vessel changes. The thickened blood vessels can reduce the flow of nutrients and removal of wastes from body tissues. This reduced blood flow can weaken the gums and bone.
2. Diabetes that is not controlled well leads to higher glucose levels in the mouth fluids. This promotes the growth of bacteria that can cause gum disease.
3. Diabetes decreases collagen synthesis, which is a key factor in wound healing. Its reduced secretion makes different oral healings harder.

Conclusions: We need to pay close attention to such case where we have a combination of two diseases by orientating them towards the right treatment, locally and systematically, also not neglecting to give them directions on how to maintain an oral hygiene that is as good as possible.

Key words: periodontium, periodontitis, diabetes, oral hygiene etc.

THE IMPACT OF DIPHENYLHYDANTOIN ON GINGIVAL HYPERPLASIA.

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Introduction: Diphenylhydantoin is a medication which is mostly used in the treatment of epilepsy and arrhythmias. Long-term use is associated with a large number of side effects, such as: osteomalacia, cleft lip and gingival hyperplasia which has the highest prevalence. Gingival hyperplasia is a process that consists of overgrowth of gingival tissue around the tooth, which is associated with edema and gingival bleeding. The aggressiveness of the disease varies from patient to patient depending on the dose and duration of diphenylhydantoin treatment.

Purpose: To identify the link between the use of diphenylhydantoin in patients suffering from epilepsy and gingival hyperplasia based on a literature review of recent years.

Materials and methods: Sources such as: contemporary scientific articles, dental journals, various books, websites such as PubMed, Cochrane Library, Medline have been used to review the literature.

Results: Although at high risk for developing gingival hyperplasia, epileptic patients require treatment with diphenylhydantoin. So these patients should have more frequent check-ups at the dentist and have maximum hygiene, so that gingival hyperplasia is at the lowest levels.

Conclusions: Patients using diphenylhydantoin are more likely to develop gingival hyperplasia, especially when the duration of treatment and the dose of the drug are at high values. A full periodontal assessment should be done of all patients who are about to be medicated with diphenylhydantoin, and if any periodontal disease is present it should be treated appropriately. A rigorous and adequate treatment brings positive effects in the periodontium to epileptic patients treated with diphenylhydantoin.

Keywords: periodontal disease, epilepsy, gingival hyperplasia, antiepileptics, inflammation, diphenylhydantoin.

THE INFLUENCE OF RESIN CEMENTS IN THE FINAL COLOR OF THE CERAMIC VENEERS

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Intoduction: Ceramic veneers had long been considered to be only esthetic implements. However, their range of indications has been steadily increasing. Today these veneers are used to restore the biomechanics of the dentition.

The purpose of this in vitro study was to evaluate the effect of three brands of resin cement on the final color of ceramic veneers.

Material and Methods: Two upper central incisors and one lateral were prepared to receive 3 IPS e.max veneers , colour A₂ using the CAD/CAM technology. The color of the restorations was verified with a spectroshade spectrophotomer in the in vitro evulation. Two dual cure cements and a self adhesive cement were chosen for cementation. The cement are Permashade LC A₂, Variolink Esthetic DC, OliCem DC. The specimens were cemented on the prepared surfaces according to the manufacturer's instructions and their color was evaluated subsequently.

The data were statistically processed with the ANOVA test.

Results: The color parameters of the ceramic veneers were measured in terms of the increase in Cab(*) value after bonding with the resin cement.

Conclusion: Resin cements can affect the final color of ceramic veneer restorations, and the extent of this effect varies according to the resin cement shades.

Key words: IPS e.max veneers, resin cement, color, spectrophotometer.

C. SESSION OF NURSING AND PHYSIOTHERAPY

Abstracts

THE ROLE OF THE NURSE IN ANESTHESIA

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Introduction: Anesthesia is the most aggressive field of medicine that mainly deals with anesthesia, putting the body to sleep (it takes consciousness, breathing and mobility) by means of narcotics for performing surgical interventions; an independent biological organism transforms it into an organism dependent on the help of another. The word anesthesia, means loss of consciousness, during which can only mean loss of feeling of pain, loss of consciousness, or both together.

Materials and methods: This study is based on data collected from a questionnaire created in surveymoneky which was distributed to 17 anesthetists from "American Hospital 1, American Hospital 2, American Hospital 3, University Hospital Center" Mother Teresa "and Military Hospital".

Results and Discussions: Despite the results of the questionnaire, comparisons with other countries and the required knowledge speak of evidence for the creation of a minimum standard.

Conclusions: In Albania there is a professional surgical master, scientific master in clinical nursing and home nursing. Moreover, according to the results of the questionnaire the anesthetist is assisted by anesthesia specialists, his colleagues, trained anesthesia nurse and mostly does that job, but often also by nurses who are free at the moment! Under these conditions the difficulty of finding certain medications or equipment for emergency rates or complications increases. Also the stress level should of course be very high as there is no profiled professional who is educated in the medications and apparatus used in anesthesia. Therefore in urgent cases when time is very limited the results with a higher dosage than the set rate or a waste of time trying to find the necessary equipment by non-professionals can also result in loss of life.

Key words: Anesthesia Nurse, Reaminator, Anesthesia.

ROLE OF YOUNG NURSES IN RESUSCITATION, GOOD ACCESS TO PROCEDURES AND PROTOCOLS

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Introduction: The Intensive Care Unit (ICU) is a special department that provides intensive care for critically ill patients. Equipped with specially trained medical staff and nurses, it also has equipment that enables continuous monitoring, in patient dynamics.

Materials and methods: The methodology of this study is based on what we have seen as nursing students in the ICU and through the questionnaire conducted with students in the field of general nursing.

Results and discussions: From the questionnaire and our observations during the internships in the hospital, we came to the results, that the new nurses are not able to work in the ICU. Of which 80% of them are unable to afford work in the ICU and only 20% of them feel ready to be part of this staff.

Conclusions: From the results obtained, as a conclusion, new educational methods should be established in the preparation of students at higher levels to provide this service, as well as the provision of many internships in this department (ICU) to cope with the work. and being willing to work in a special department such as the ICU.

Key words: ICU / Resuscitation, Nursing care, nursing procedures, medical assistance.

ACE SCORE AND PROBABILITY OF OCCURANCE OF CARDIOVASCULAR DISEASES.

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Introduction: Childhood psychoemotional traumas have an incredibly important impact on the formation of an individual's personality, but not only. Studies have shown a correlation between psycho-emotional trauma experienced during childhood and the occurrence of chronic diseases. According to studies, a large proportion of patients suffering from chronic illness have gone through a traumatic psychoemotional phenomenon in the past.

Given that in the Mediterranean basin, but not only, one of the most characteristic diseases that affect the mass of the population, i.e. that is expressed with a very high incidence and prevalence are cardiovascular diseases. The existence of a pathological factor such as psycho-emotional trauma in terms of cardiovascular disease would lead to the creation of very necessary recommendations in reducing the incidence of this group of pathology

Materials and Methods: This is a cross-sectional study. A group of students attending Aldent University and a group of cardiac patients receiving medical treatment at QSUNT were randomly selected in order to identify past psycho-emotional stressors and then the probability of the impact of these stressors on cardiovascular health. data were collected by performing ACE scoring and then compiled in SPSS.

Results: According to the data collected and after correlation in SPSS, a statistically logical link between psychoemotional stress in childhood and the occurrence of cardiovascular disease will be established. This influence will probably be attributed to the formation of a closed and unhealthy personality, which leads to an unhealthy and extremely stressful lifestyle. All this negatively affects cardiovascular health.

Conclusions: -The higher the ACE-Score the higher the probability of developing cardiovascular disease.

Keywords: Cardiovascular Health, Trauma, Stress.

INCIDENCE AND PREVALENCE OF COLON-RECTAL CANCER IN ALBANIA. PRECIPITATIVE FACTORS

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Introduction: Recently, the incidence of oncological diseases affecting the gastrointestinal tract, specifically the colon and rectum has increased significantly. According to the IPH, in Albania in 2018 there are about 213 deaths due to colonorectal cancer, but this figure still remains growing. Colonorectal cancer affects masses over the age of 50, and is one of the deadliest tumors in men after lung cancer. There are a number of known etiological factors which are discussed little or not at all and which are not considered as preventive methods of cancer occurrence. Evaluation and identification of these precipitating factors is a key step in the prevention of tumor diseases affecting the colon and rectum, and these factors must be taken into account when performing screening methods.

Materials and Methods: A group of patients suffering from colon cancer were treated at QSUNT in order to identify precipitating factors of cancer. All collected data were compiled in the statistical program SPSS.

Results: According to the collected data, and after performing the correlation in SPSS, it turns out that a number of factors such as: lifestyle, concomitant diseases, heredity, etc. affect the occurrence of colonorectal tumors. These factors are little or not identified by treating physicians and no health education program exists in order to prevent the timely occurrence of tumor diseases of the gastrointestinal tract.

Conclusion: Timely identification of precipitating factors of colorectal cancer prevents the occurrence of the disease, increases the incidence and reduces mortality.

Keywords: Gastrointestinal health, Tumor diseases, Incidence, Precipitation factors.

NURSING MANAGEMENT OF AGGRESSIVE SITUATIONS IN PSYCHIATRY

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Introduction: To manage agitated patients the nurse must adhere to the care protocol. Nurses primarily guarantee the safety of patients, all other patients and themselves. They take measures not to allow the escalation of aggression, remove their tools, restrict patients if they will be controlled, use medication for violence, conduct a possible monitoring. When managing exposed patients should take into account the risk of occurrence of the effects of the use of drugs being administered to agitated patients. Collaboration with specialist doctors and psychotherapy is medical. Education is a big aspect.

Materials and Methods: A review of the literature and clinical experience on the protocol of nursing care regarding the care of psychiatric patients and the issuance of necessary measures to protect both the staff and other patients

Results: Preliminary outcomes of patients before the performance of the nurse's performance is an event that occurs in the prevention of the incident that manifests itself in aggression in patients with psychiatric disorders. The better the history of the disease, the better it appears in patients, the lower the risk of typical aggressive activities. A retrospective assesment of psychopharmacological preparations used in psych patients will also make a positive impact on the reduction of aggression. Educating the parent or caregiver but also patients themselves (when the situation allows) gives positive outcomes.

Conclusions: - Psychotherapy is the only proven way to prevent aggressive thoughts or agitation in psych patients.

-The more we mind our behavior towards the patients less likely it is for them to get agitated.

Keywords: Psychotherapy, Agitation, Aggression, Behavior, Nursing Care

MEASENTER THROMBOSIS. CAUSES OF INCREASED INCIDENCE IN ALBANIA

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Introduction: Mesenteric thrombosis is a debilitating disease which affects gastrointestinal health and in most cases is incompatible with life. Treatment consists of urgent surgical intervention in order to preserve the function and perfusion of the affected organs (often the stomach, small intestine, mesentery and surrounding organs). Recently, in Surgical Resuscitation at QSUNT an increase in incidence and mortality has been observed as a result of this disease. Precipitation factors have not yet been identified, and no preventive measures exist to avoid this severe complication of gastrointestinal tract hemodynamics

Materials and Methods: Cases that have been presented with this diagnosis in Surgical Resuscitation have been reviewed and an attempt has been made to find a correlation between this complication and SARS-CoV-2 infection in the past so that this diagnosis can be considered a long-term complication. Infection with SARS-CoV-2. All collected data were compiled in SPSS.

Results: Because data collection has been extremely difficult because this diagnosis is often incompatible with life, achieving fixed results is not yet possible. Preliminary results indicate that there is a link between severe transmission of SARS-CoV-2 infection and future occurrence of mesenteric thrombosis

Conclusions: -Mesenteric thrombosis may be a long term complication of SARS-CoV-2. This fact should be further examined and studied in order to create concrete recommendations in preventing the occurrence of this complication or an adequate anticoagulant therapy during or after the passage of the virtual infection.

Keywords: SARS-CoV-2, Mesenteric thrombosis, Long-term complication, Anticoagulant therapy.

IMPORTANCE OF PHYSIOTHERAPEUTIC REHABILITATION IN PATIENTS WITH EPICONDYLITIS (LATERAL EPICONDYLITIS)

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Introduction: Epinkodilites are anatomic structures which are localized only in the cubitic joint. Epicondylitis is inflammation of the epicondyle. Lateral epicondylitis is otherwise called tennis elbow. This pathology is manifested in the patient with pain and inability to mobilize the joint. The objective of the study is to identify the importance of physiotherapeutic rehabilitation in regaining the functionality of the cubiti joint in patients with epicondylitis lateralis. The aim is to identify physiotherapeutic rehabilitation in the patients with tennis elbow.

Materials and methods: A patient diagnosed with epicondylitis lateralis was selected. A detailed physiotherapeutic protocol was applied to the patient. Parameters before and after were measured. The results were analyzed using the subjective pain assessment scale VAS (Visual Analogue Scale). This linear scale is the visual representation of the amount of pain a patient thinks they are experiencing.

Results and discussion: It was found that the patient taken in the study after the application of physiotherapeutic protocol had improvements in reducing pain as well as in improving the functions of daily life. The patient's psychological state also progressed.

Conclusions: The applied physiotherapeutic protocol was successful in patients with epicondylitis lateralis.

Keywords: epicondylitis, cubitis joint, physiotherapeutic rehabilitation, pain.

THE EFFECTIVENESS OF THORACIC MOBILISATION (LEWIS MOBILISATION) AT COVID-19 PATIENTS

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Introduction: Covid-19, the pandemic of the years '19 -'22 brought many loss of life and many neuromotor deficits in the population. Our study will focus on analyzing the role and the efficacy of Lewit mobilizations in increasing thoracic mobility in post Covid-19 patients.

Materials and methods: To understand how effectiveness was Lewis mobilisation we choose a post Covid-19 patient who was intubated for 2 months. The patient selection criteria were:

1. The patient should be post Covid-19
2. It should not have been more than 1 month since the patient's negativity

In addition to respiratory physiotherapy, Lewis mobilizations in the thoracic region were on purpose to analyze the effectiveness or not in increasing thoracic mobility and in increasing respiratory capacity. The patient was followed in dynamics for 10 sessions.

Results and Discussions: Based on the results it was found that Lewis mobilizations were effective in increasing pulmonary capacity to 93% of it, in reducing the frequency of respiration for minute and in improving physiological painless thoracic mobility.

Conclusions: It was seen that during 10 physiotherapeutic sessions the pulmonary capacity, according to the spirometer, reached 93% of it, but we failed to gain 100% of the pulmonary capacity because a longer rehabilitation time is required.

Key words: Thoracic, respiration, Lewis mobilizations.



D. SESSION OF TECHNICAL MEDICAL LABORATORY AND IMAGING

Abstracts

MEASUREMENT OF VITAMIN D IN ADULTS. ITS ROLE AND THE CONSEQUENCES OF DEFICIENCY IN THE HUMAN BODY.

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Introduction: Vitamin D is essential for the maintenance of a good health. Its sources can be skin sintetization and diet intake. Assessing the values of this vitamin is essential to human health because its deficiency leads to various morbidities such as; bone, cardiac, neurological, endocrine pathology, cancer. We aimed to assess the values of this vitamin in adults of different ages specifically in health sciences university students.

Materials and methods: A random case-control study with a contingent of 70 subjects taken from Aldent University They were informed and agreed to be part of the study. The analyzed samples were obtained through the venopuncture procedure. Serum was obtained through centrifugation and the measurement of vitamin D in serum was performed through Ichrome II. Quantitative measurements were performed and statistical analysis through SPSS program.

Results and Discussions: Our data showed that 84.1% of total population of the subjects were females and 15.9% males. Of these, 91.3% of subjects resulted in vitamin D insufficiency and 8.7% in deficiency. It was found lack of information on the role it has in the human body as well as a rare laboratory measurements of this vitamin by the subjects.

Conclusions: Diet poor in vitamin D, insufficient exposure to sunlight as well as negligence of continuous measurement of vitamin levels, have resulted in the late identification of reduced levels of vitamin D and as a result is observed deficiency.

Key words: vitamin D, deficensy, adults, analysis

BACTERICIDAL ACTION AND EFFECTIVENESS OF ANTIBACTERIAL PRODUCTS

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Introduction: Ethyl alcohol, gel disinfectants and wet wipes are usually recommended for disinfecting various environments or the hands. It is assumed that they have a bactericidal action of over 99% and consequently a high efficiency. Nowadays all 3 of these elements are known and have a wide use. We aimed to compare the effectiveness of a 96° ethyl alcohol, a disinfectant gel and wipes on microorganisms such as: *Staphylococcus aureus* and *Escherichia coli*.

Materials and methods: We evaluated and compared the bactericidal effect of ethyl alcohol, disinfectant gel and wipes on microorganisms such as: *Staphylococcus aureus* (ATCC6538) and *Escherichia coli* (AzAcc) performing the antibiogram. A sample of contact was inoculated in bouillon media before and after cleaning an object with wet paper. The samples were placed in the thermostat at 37 °C for 24 hours. After 24 hours of incubation the formed suspension was inoculated into blood agar and macConkey media.

Results and Discussions: From the data were observed that in the case of *Staphylococcus aureus* a greater bactericidal effect was seen from wet papers and a smaller effect ,aproximately the same was seen from the disinfectant gel and alcohol. In the case of *Escherichia coli* a higher effectiveness was seen from ethyl alcohol, while the disinfectant gel and wet papers showed a low bactericidal effect.

Conclusions: The effectiveness of antibacterial products is influenced by several factors such as; the type of bacteria, the amount of disinfectant or the conditions in which it is used.

Key words: antibiogram, bactericidal effect, *staphylococcus aureus*, *e.coli*

THE EVOLUTION OF RADIOTHERAPY

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Introduction: Radiotherapy, also known as radiation therapy, is a common oncologic treatment modality utilizing ionizing radiation to control or eliminate malignant cells (but not only). Radiotherapy plays a role in primary curative treatment, adjuvant therapy and palliation of cancer symptoms. Radiotherapy may be used alone, or synergistically with chemotherapy or immunotherapy.

Radiation therapy machines currently used in clinical practice are the result of evolution over a long period of time. Various areas of science, such as medical physics, mechanical engineering, and computer engineering, have contributed to the continual development of the technology. The scope of the review was restricted to two areas; i.e., output energy production and functional development, due to space limitations. The former includes the technological transition from initial techniques applied to the first model to the latest technology that is currently in use in a variety of machines. The latter have had a direct effect on treatment outcomes and the safety of radiation therapy. These developments changed the paradigm of radiation therapy, leading to new guidelines on dose prescriptions, innovation of dose verification tools, new measurement methods and calculation systems for radiation doses, criteria for errors, and changes in medical laws in each country.

Materials and methods: peer-reviewed and lay publications.

Results and Discussions: The significant changes that have occurred to elevate radiation therapy as a significant modality in treating cancer.

Conclusions: Radiation has been used in medicine since its discovery in the 19th century. Since the start of the 20th century, radiation has been increasingly used to diagnose and treat cancer. Although, radiation therapy was often known to destroy healthy tissue in its attempt to kill cancer cells, technological advancements have allowed for precise and accurate therapy, providing a viable option as a cure for individuals diagnosed with cancer.

Key words: innovation; radiation oncology; technology.

A CASE STUDY: CT-GUIDED TRANSTHORACIC BIOPSY OF LUNG

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Introduction: CT is a valuable tool for use in interventional procedures such as biopsies including those of lung abnormalities. This modality is preferred over others for guiding lung biopsy procedures to obtain tissue for a histological diagnosis in cases of suspected lung cancer.

Aim: The aim of this study is to highlight the importance of CT usage on lung biopsy guidance.

Materials and methods: In March 2022 I took under observation a case of lung malignancy suspicious (*male 67years old*). He underwent Computer Tomography at *University Hospital "Shefqet Ndroqi", Tirana, Albania*. Images were acquired with CT Siemens SOMATOM Definition Dual Source 128-slice scanner in order to lead our Radiologist during biopsy material obtaining. The patient's position was very important to allow easier access to the lesion. Also, a postprocedure scan was taken to identify possible complications such as pneumothorax or hematoma.

Conclusion: High-resolution CT images provide precise three-dimensional localization of lesions allowing this way the clinician to plan an ideal access route to the tumor by showing with high accuracy the relationship of surrounding structures.

Keywords: lung, cancer, biopsy, CT.

RADIOTHERAPY TREATMENT OF A BRAIN TUMOR

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Introduction: Tumor or otherwise neoplastic diseases are becoming one of the basic health problems. Alongside the development of these diseases different ways for their treatment are being developed as well. Radiotherapy treatment of a tumor disease involves the use of ionizing radiation with energy of the order of kiloelectronvolt and megaelectronvolt, which is generated by cobalt source equipment (CO-60) or linear accelerators LINAC, and such doses require special radiation care. This care is achieved through the application of the Treatment Plan System (TPS), which aims to deliver as accurately as possible the dose set for the target volume while optimally maintaining normal tissue or vital healthy organs that surround tumor structure.

Meningiomas are a type of intracranial tumor that accounts for 33% of all primary brain tumors. They are divided into three degrees benign, atypical and malignant. Radiotherapy is necessary as a post-surgical treatment in atypical and malignant meningioma in order to "clear" the borders around the tumor from cancer cells which may have remained after surgery and may become the cause of a secondary tumor. Below we will introduce the treatment of a Meningioma using the technique of Radiotherapy.

Materials and methods: The treatment plan begins with the creation of the herd and the data for it: Number of fields, Field energy, Gantry angle, Bed corner, Collimator angle, Field size, Doses.

Results: The patient, after deciding to be treated with radiotherapy after being diagnosed with a second-grade Meningioma tumor, is prepared a treatment plan. The patient in question will be irradiated for 28 days. The daily dose that the patient receives is approximately 2Gy. The total dose the patient will take for 28 days is 55.8Gy.

Conclusions: The dose taken from the tumor volume and surrounding organs are shown on the histogram of dose-volume .

After verification of the treatment plan, it was observed that the organs at risk receive less radiation while the tumor receives the required dose. The results are clearly seen in the histogram presented for this case. The accuracy of radiotherapy treatment is 5 mm.

Keywords: Treatment Planning System (TPS), Dose-Volume histogram, Radiation field, GTV, CTV, PTV, OAR (The organs at risk).