



**ALDENT
UNIVERSITY**

**Student Scientific
Conference **II**^{-nd}**

26 May, 2017

BELIEVE TO PROFESSIONALS



Scientific Committee:

Prof. Dr. Afrim Tabaku (Chairman)
Prof. Asoc. Entela Haloci
PhD. Edlira Neza
Dr. Enkelejda Goci
Dr. Edlira Dedaj
Msc. Nineta Fino
Msc. Orges Simeon
Msc. Fregen Dedja
Msc. Mirva Hoxha
Dr. Rezarta Shkreli

Organizing Committee:

Dr. Enkelejda Goci
Msc. Orges Simeon
Msc. Fregen Dedja
Alba Kamberi
Eva Aliraj
Mirsada Ishmakej
Megi Mësonjësi

Design:

AVANTGARDE
graphic design & handmade

Press:

SHTËPIA BOTUESE
mediaprint

ISBN 0123456789XXX

Address: **Dibra Str. 235, Tirana, Albania**

Email: **info@ual.edu.al**

Web: **www.ual.edu.al**

Telephone: **04 2419036**

Mobile: **(+355) 69 20 75216, 069 40 30003**

INTRODUCTION

After the positive impact gained from the first edition of the Student Scientific Conference, ALDENT University, with the support of the Pharmacotherapeutic Research Center and the Clinical Service Center, also this year launched the initiative for the organization of this large enterprise in the field of scientific research.

This second edition of this conference comes with a promotion and engagement of students of study programs Pharmacy, Dentistry, Physiotherapy, Nursing and Dental Laboratories.

The 2nd Student Scientific Conference brings research works and studies to our students led by academic staff in their professional fields as well as collaborations with similar institutions.

This tradition is initiated, organized and managed by the Scientific Council of the University in cooperation with the Student Senate. The Scientific Council has promoted institutional research and involvement of students as an important part of research projects.

This conference aims to bring together students and professionals of medical fields serving as a forum for professional research discussions.

The ALDENT University's staff congratulates the successful work of the Second Scientific Student Conference and continuity in further editions.



SUMMARY

A. SESSION OF PHARMACEUTICAL SCIENCES

A descriptive survey of knowledge of pharmacovigilance and adverse drug reactions among final year Albanian students of medical faculties	8
Phenol in urine as a biomarker of population exposure to benzene	9
Evaluation of Vitamin C tablets 100 mg in albanian pharmaceutical trade	10
Some dermatological formulations of capsicum frutescens extracts	11
Knowledge of students of medical sciences faculties over law medical devices	12
A general survey over the mistakes in models prescriptions of drugs	13
The drug-drug interaction survey in cardiology and pediatric units of the Regional Hospital of Berat city	14
Study of morbidity in Shëngjergj Region	15
Pharmacopeal comparative assessment of certain generic brands tablets circulating in Albania	16
Safety of tagetes patula in cosmetics	17
Air pollution and health effects on people living in Kruja region	18
Evaluation of antibiotic use in the Urologic Surgical Ward in the University Hospital "Mother Teresa"	19
Optimization of yield and the impurity of synthesized aspirin by chromatographic method	20
Mellitus Diabetes, incentives and medicine in the korces region	21
Development of pharmacy network in Albania last years	22

B. SESSION OF PHYSIOTHERAPY AND NURSING

Dementia and Alzheimer's disease	24
Carpal Tunnel Syndrome (CTS)	25
Frozen shoulder, diagnosis and its rehabilitation	26
Nursing care in Juvenile Rheumatoid arthritis	27
Nursing care in patients with Psoriasis Vulgaris	28
Nursing care for the patient in Hemodialysis	29
Nursing care for patients in Onkogynecology	30
Nursing care for patients in Hematology (Cancer Leukemia Sanguinem)	31
Physiotherapeutic treatment of Scoliosis patients	32

C. SESSION OF DENTAL SCIENCES

Management of fear and anxiety among children in dental cabinet_____	34
Description of antibiotics in dental clinics/ antibiotic-resistance_____	35
Periodontal disease in heavy serious occupations (mining)_____	36
Dental trauma_____	37
Determination of the working length during endodontic procedures_____	38
Evidence of skeletal class by Steiner Analysis in students of the Aldent University_____	39
Bruxism and his prosthetic treatment_____	40
The diagnosis of the odontogenic cysts_____	41
Ankylosis_____	42
Fluorine, its balance in organism and use in the prophylaxis of caries_____	43
Difficulties in communication during the treatment of patients with disability in dental cabinets_____	44
Deep and brush zirconia K2 zircon liquid_____	45
Hypertrophic gingivitis as a consequence of the presence of the cavities and incorrect restorations (clinical case)_____	46
Ergonomic work posture in undergraduate laboratory technician students, correlation between theory and practice_____	47
An alternative treatment for enamel hyperesthesia with tiefenfluoride solutions_____	48
The varity of toothpastes in Albania and their correlation with their efectivity on teeth's hard and soft tissue at adult patients_____	49



A. SESSION OF PHARMACEUTICAL SCIENCES

Abstracts

A descriptive survey of knowledge of pharmacovigilance and adverse drug reactions among final year Albanian students of medical faculties

ELISA HODA; REXHINA BICI; VALENTINA METUSHI; Prof.Dr. AFRIM TABAKU

Introduction: Adverse Drug Reactions (ADRs) are encountered commonly in the daily practice. These reactions are adverse consequences of drug therapy being one of the leading causes of morbidity and represent a substantial burden of healthcare resources. Adverse drug reactions are preventable if the healthcare professional pays close attention to the details of the adverse effects, following a drug administration. Hence, there is an urgent need to create an awareness among the final years students of medical faculties about the, pharmacovigilance, ADR monitoring and reporting.

The aim of our survey was to assess knowledge and perceptions about pharmacovigilance and reporting of ADRs between senior medical, pharmacy and nursery students of state and private medical universities.

Material and methods: A cross-sectional survey was conducted from November 2016 to mars 2017 among 349 final students of medicine, pharmacy and nursery of Public and private Albanian medical schools using a questionnaire to collect the information on definition of pharmacovigilance, the overall aim of pharmacovigilance, on international center of pharmacovigilance, on organism of WHO responsible for database and reporting in of ADRs, and well as theirs knowledge about reporting of ADRs, etc.

Results and discussion: The results obtained by this survey have shown that the awareness, knowledge and the methods of application of pharmacovigilance was lesser in the students of nursery, as compared to the students of pharmacy and medicine and about half of them vouching that reporting of ADRs should be mandatory as it is going to benefit patients.

Conclusions: The results of this survey demonstrate that the majority of final-year medical university students have insufficient knowledge about pharmacovigilance and ADR reporting. Results of our survey revealed that there are gaps between knowledge regarding ADRs and Pharmacovigilance that needs to be addressed on priority basis for the success of the Pharmacovigilance program and better clinical management of patients in general.

Keywords: pharmacovigilance, adverse drug reactions, knowledge, attitude, questionnaire.

Phenol in urine as a biomarker of population exposure to benzene

ELDA SEFA*; **AFRIM TABAKU****

**Aldent University*

***Center for Pharmacotherapeutics Research*

Introduction: Exposure to low levels of environmental benzene is unavoidable due to the ubiquitous presence of benzene in the environment from a variety of anthropogenic sources. Individuals who live near hazardous waste sites or near leaking underground fuel storage tanks might be exposed to potentially high concentrations of benzene.

Biomarkers are broadly defined as indicators signaling events in biologic systems or samples. Several biomarkers of exposure to benzene have been reported in the literature. Urinary phenol measurements have routinely been used for monitoring occupational exposure to benzene, and urinary phenol levels appear to be correlated with exposure levels.

The aim of our survey was to assess benzene exposure of Fieri region population through collecting data of urinary phenol as benzene biomarker of exposure.

Material and methods: It is carried out a retrospective survey based on data of urinary phenol in patients hospitalized in Fieri regional hospital. We have collected data on urinary phenol from 125 files of patients exposed to benzene. Of total number of patients 31 were inhabitants of Fier city and 94 patients from oilfield zones. Determination of benzene is carried out by colorimetric methods.

Results and discussion: Data obtained from this survey have shown that in patients living in Fieri city the concentration of phenol in 24 hours urine were oscillated from 27 to 98 mg in 24 hour urine, and in patients living in oilfields zones were 45 - 287 mg / 24 h urine. There were no significant differences between to groups of patients regarding concentration of phenol in urine.

Conclusions: The results of his survey put in evidence that only 6.4% of patients of Fier city have the concentrations of phenol in urine within permissible limits, whereas in oilfield zones the levels of phenol in urine within permissible limits were 3.12%

Keywords: phenol, biomarker of exposure, benzene, oilfield zone.

Evaluation of Vitamin C tablets 100 mg in albanian pharmaceutical trade

VALBONA ALUSHI*; **MARSIDA DEMARKU***; **Dr. ENKELEJDA GOCI****

**Department of Pharmacy; Faculty of Medical Sciences; Aldent University*

*** Pharmacotherapeutic Research Center; Faculty of Medical Sciences; Aldent University*

Introduction: Ascorbic acid is one of the important vitamins soluble in water. Many plant and animal synthesize ascorbic acid according to their needs. However, monkeys and humans cannot synthesize ascorbic acid due to lack of gulonolactone oxidase enzyme.

Recognition of vitamin C is associated with the history of the search for the cause of an ancient disease like scurvy. Isolated 1928, vitamin C is important for the development and maintenance of connective tissue. It plays an important role in bone formation, wound healing and maintaining healthy gums.

Increased use of pharmaceuticals and natural products that contain vitamin C led to the necessity of developing accurate and specific procedures for its determination.

The purpose of this study was the pharmacopoeial evaluation of vitamin C tablets circulating in the Albanian market.

Materials and methods: drugs were selected from registered in the Republic of Albania vitamin C 100 mg tablets. The tablets were subjected to organoleptic control, physical and chemical control. During this assessment was determined the average tablet weight, hardness, friability, time of disintegration, dissolution test and the qualitative and quantitative determination are done by thin layer chromatography and iodometry.

Results and conclusions: The tablets selected who underwent assessment presented no significant changes pharmacopeia reference limits. During the qualitative identification in each case confirmed the presence of vitamin C. quantified through iodometry given active substance values in the limits 92-105% of the amount declared for the sample A and values more than the allowed limits for sample B.

Keywords: tablet, vitamin C, physical control, organoleptic control, chemical control.

Some dermatological formulations of capsicum frutescens extracts

JONA MJALTI*; **ERALDA RAMI***; **ENKELEJDA GOCI****

** Department of Pharmacy; Faculty of Medical Sciences; Aldent University*

*** Pharmacotherapeutic Research Center; Faculty of Medical Sciences; Aldent University*

Introduction: Capsaicin is the main capsaicinoid of capsicum frutescens, followed by dihydrocapsaicin. It is known for efficient absorption through the skin. Topical creams of capsaicin are used for therapeutic purposes in the treatment of peripheral pain in pathologies such as rheumatoid arthritis, diabetic neuropathy, osteoarthritis, muscular pain, herpes, etc. Capsaicin, according to its mechanism of action, administered locally to the skin, promotes an anti-inflammatory action and an analgesic response due to desensitization of sensory neurons, caused by release of substance P.

The aim of this study is the formulation of some topical preparations of alcoholic extracts of chili pepper on various bases.

Materials and methods: were selected from the market chili peppers Capsicum frutescens species, identified by the Department of Botany FNS. The herbal drugs underwent pharmacopeia requirements on moisture and ash content. The extract obtained through maceration was inclusion in hydrophilic bases of macromolecular polymers and lipophilic bases.

Preparations obtained underwent organoleptic control assessment, rheological control, and determination of pH and identification of capsaicin.

Results and conclusions: The drugs taken to study fulfill the pharmacopeial demands regarding the percentage of humidity and allowing total ash content. Preparations formulated present the best features of homogeneity and high dispersive ability. Also the pH values were within the permissible limits for dermatological preparations.

Keywords: capsicum frutescens, capsaicin extracts, hydrophilic base, lipophilic base.

Knowledge of students of medical sciences faculties over law medical devices

ALBA KAMBERI*; **RIXH MUHAMETI****; **ENKELEJDA GOCI*****; **AFRIM TABAKU*****

**Department of Dentistry; Faculty of Dental Sciences; Aldent University*

***Department of Pharmacy; Faculty of Medical Sciences; Aldent University*

****Pharmacotherapeutic Research Center; Faculty of Medical Sciences; Aldent University*

Introduction: Medical devices that exist and are used currently in the Albanian health system are parts of different policies and times. After 90s years was made possible the introduction of a new range of medical devices and unknown earlier, mainly through various donations.

After some years of work, in 2006 was designed the plan of the National Policy for the Management of Medical Devices in Albania and in 2014 was reached to adopt the law 89/2014 on Medical Devices in the Republic of Albania.

The purpose of this study was to test the knowledge of students of medical sciences over the law and its scope.

Materials and methods: This study involves students of study programs: Pharmacy (year 4), Dentistry (year 4), Nursing (year 3) and Physiotherapy (master). The methodology used for gathering the information was to design a questionnaire and screening the knowledge of Aldent University students over this law. The questionnaire contained six sections with background information on the definition of medical devices, the scope of application, registration and inspection of medical devices.

Results and discussion: after statistical processing of the data collected was concluded that the student's information about this law was very low, about 50 percent of them. 37 percent of students study program Pharmacy had information about the law and respectively 55%, 92,8%, 30% of students of study programs Dentistry, Physiotherapy and Nursing.

Conclusions: The lack of information of medical students, medical professionals of tomorrow, constitutes the necessity of involving the Albanian legislation in their study programs.

Keywords: Law 89/2014, medical devices, students.

A general survey over the mistakes in models prescriptions of drugs

EVA ALIRAJ*; **MEGI MESONJESI***; **LEDIA LLAPI****; **ENTEHA HALOCI*****; **ENKELEJDA GOCI******

**Department of Pharmacy; Faculty of Medical Sciences; Aldent University*

***Community Pharmacy "Ledia", Vlora*

****Department of Pharmacy; Faculty of Medicine; University of Medicine, Tirana, Albania*

*****Pharmacotherapeutic Research Center; Faculty of Medical Sciences; Aldent University*

Introduction: The rules on which are written recipes are predefined and are part of study in medical science study programs. Writing parts of the format prescription are: section of patient data; recipe section and the last part of it, which includes descriptive data of the doctor and the date.

The aim of this study was the casual screening of the method of application of the rules on the format writing OTC recipes executed in some pharmacies of the Vlora city.

Materials and methods: The methodology used for gathering information was detailed examination of the 100 OTC recipes collected randomly from several pharmacies of the Vlora city, executed in three months. By the survey of every prescription they were categorized into groups by the lack of part of the missing script format.

Results and conclusions: After the statistical processing of the data collected was seen that the most common errors were lack of patient data, about 90% of total prescriptions. In 30 % on selected recipes was the lack of information on descriptive data of the doctors which prescribed the treatment.

Discussion: Application of the rules on prescription writing is a necessity to eliminate medical errors.

Keywords: rules, the format of writing, recipes, medical errors.

The drug-drug interaction survey in cardiology and pediatric units of the Regional Hospital of Berat city

PRANVERA SELENICA¹; BLERINA (HASHO) ÇULLAJ²; KLODIOLA DHAMO³

Background: Drug - drug interaction (DDI) are one of the factors causing a drug-related problem. The expected therapeutic response may be affected by the presence of drug interactions. With the high number of reports on new drug interactions, it has been difficult for health professionals to keep constantly updated. For this reason, computer systems have helped identify such interactions.

Objectives: To verify the rate and profile of drug interactions in medical prescriptions to hospitalized pediatric and cardiovascular patients in the Regional Hospital of Berat City.

Material and methods: The data for this survey were collected by conducting an analysis of 40 medical records of adults suffering by cardiovascular disease and 70 medical records of pediatrics which were hospitalized during period from December 2016- March 2017.

The data collected for this study included demography, the amount of drug, and patient diagnoses. The analysis of interaction and incompatibility possibilities in prescribed drugs used Micromedex / Drug-Reax[®] program

Results and discussion: By using Micromedex program in our survey, we have found in total 30 DDI in patients suffering by cardiovascular disease. 36.6% of these DDI were pharmacodynamic type, whereas 10% have shown pharmacodynamic synergism. Regarding severity, 10% of DDI were moderate, 6.6% severe and the rest have resulted minor.

In pediatrics wards were found also 30 DDI. 28.56% of these DDI were pharmacokinetic and 8.38% pharmacodynamic type. 4.19% of DDI found in pediatric wards were moderate. 14.2% of DDI had shown pharmacodynamic synergism and 4.7% have had shown pharmaceutical incompatibility

Conclusions: We detected a significant number of DDI in patients hospitalized for heart disease, as well as in pediatrics patients.

Study of morbidity in Shëngjergj Region

FREDIANA BRAHIMI¹; BLERINA (HASHO) ÇULLAJ²; KLODIOLA DHAMO³

Background: Morbidity of population constitutes an important health problem in almost all countries. Moreover, many definitions and interpretations of this phenomenon are used in different ways. Due to social and clinical importance, it is important that the concept is clear. With the increasing number of chronic diseases, there will be changes in the expectations of the results obtained from the treatment of diseases. In general practice many elderly patients suffer from more than one chronic disease.

Objectives: The aim of this study is to describe the extent of morbidity in region of Shëngjergj, in Tirana City.

Material and methods: We have conducted a survey of 100 medical records taken from the total, as well have studied 196 of the check up examination data. Analysis of distribution and percentage for every disease were made using Microsoft Excel program.

Results and discussion: Using Microsoft Excel program in our survey of 196 of the total check up examinations data, we found a total of 16 different diseases. Of the 100 medical records, we found 24 different diseases. The prevalence of reported multi-morbidity ranges from less than 1% to over 50%, with the highest prevalence in the elderly, in total 16 different diseases. Of 100 medical records we have found 24 different diseases.

Conclusions: The prevalence of diseases encountered by the study of 196 general check up examinations was: 1.5% Diabetes mellitus, Chronic hepatitis 2%, Dyslipidemia 5.1%, Arterial hypertension 3.5%, Hypochrome anemia 1.5%, etc.

The prevalence of diseases encountered by the study of 100 medical records was: Arterial hypertension 10%, 13% asthmatic bronchitis, Chronic obstructive pulmonary disease 7%, IKK 5% diabetes mellitus 10% etc.

Multi-morbidity restricts the validity of external results obtained from the treatment of a single disease and complicates the organization of care on diseases.

Pharmacopeal comparative assessment of certain generic brands tablets circulating in Albania

ERA KUCI; REZARTA SHKRELI*

Department of Pharmacy, Faculty of Medical Sciences, Aldent University, Tirane, Albania

Introduction: Quinolones are bactericide agents with a broad spectrum of action and are effective against gram-negative bacteria as well as those gram-positive ones. Quinolones used to treat infections caused by bacteria that are resistant to many antibiotics action. The quinolones indications are: infections of the lower respiratory tract, dermic infections, bone and connective tissue infections as well as urinary tract infections caused by: *E. coli*, *K. pneumonia*, *Proteus mirabilis*, *Pseudomonas aeruginosa*, etc. There are a large number of generic tablets circulating in Albanian pharmaceutical market, where ciprofloxacin active principle is mostly used in 250mg, 500 mg and 750 mg dosage-forms.

The aim of the paper was the pharmacopoeal qualitative-quantitative-assessment of solid dosage-forms ciprofloxacin 500 mg circulating in the Albanian pharmaceutical market, according to BP 2007.

Materials and methods: Four generic film-coated tablets of ciprofloxacin 500 mg, as follows: Test T₁, Test T₂, Test T₃ and Test T₄, were taken for evaluation in our study. It was carried out organoleptic as well as the physiochemical control: disintegration test, hardness test, uniformity of mass test, as well as qualitative (Thin Layer Chromatography) and quantitative determination of ciprofloxacin (Spectroscopy UV-VIS) according to BP 2007.

Results and discussion: Ciprofloxacin tablets (T₁, T₂, T₃ and T₄) were uniform in appearance and in cutting, coloring evenly, without spot and points, with rounded edge. All 4 samples T, disintegrated within 30 minutes. From the hardness test, T₄ had the same value to T₁ (T₁-198 N, T₄-199 N), while T₂ and T₃ had the lowest one (about 117 N). The average weight of the samples were similar to that reference, T₁ (T₁-787 mg, T₂-779 mg, T₃-768 mg and T₄-781 mg). All four tests proved the presence of the active principle, ciprofloxacin. Quantitative analysis showed that the samples T₂, T₃, and T₄ contained about 98% ciprofloxacin, while T₁ contained only 92%.

Conclusions: Comparative, qualitative and quantitative data of samples: T₂, T₃ and T₄ had changes referred T₁, but four generic tablets (T₁, T₂, T₃ and T₄) proved the pharmacopeal validity of dosage-forms for use in the pharmaceutical market.

Keywords: generic tablets, pharmacopeal limits, qualitative-quantitative assessment, ciprofloxacin 500 mg.

Safety of tagetes patula in cosmetics

ERA MEMINAJ; EDLIRA NEZA

Background: The Compositae (Asteraceae) family of plants is currently an important cause of allergic plant contact dermatitis in Europe. Sesquiterpene lactones are the most important allergens in the Asteraceae family. Some studies suggest also sensitization from a coumarin, a sesquiterpene alcohol and a thiophene. *Tagetes patula* L. (Asteraceae) is a plant well known for a wide range of biological activities related to the presence of thiophenes, but also benzofurans, carotenoids and flavonoids. The plant has antibacterial, antifungal, antiviral, insecticidal activity. In cosmetic *T.patula* is used for its antioxidant and anti-wrinkles properties. *T.patula* essential oils is also as a fragrance component in cosmetics. Major constituents of tagetes extracts/oils are limonene, (E)- β -ocimene, β -phelandrene, p-cymene, β -caryophyllene. In order to evaluate the safety of *T.patula* in cosmetics we reviewed the papers published related to *T.patula* and also the SCCS opinions on the safety of *T.patula* on cosmetic products.

Materials and methods: Research was done on pubmed using the key words, "*T.patula* and cosmetics", "*T.patula* and contact dermatitis", "*T.patula* and phototoxicity", "*T.patula* and safety".

Results and discussions: In eighty one scientific articles studied, cases of sensitization of contact dermatitis, caused by sesquiterpene lactones present on *T.patula*, were published. *T.patula* contains alpha-terthienyl, responsible for the phototoxicity of tagetes extracts/oils. Limonene another compound of essential oil of this plant is a known allergen.

Conclusions: The prevalence of sensitization is low for *T.patula* in cosmetics and the prevalence of phototoxicity is higher. The SCCS considers a maximum level of 0.01% *T. patula* extracts and essential oils in leave-on products (except sunscreen cosmetic products) as safe, provided that the alpha terthienyl (terthiophene) content of the Tagetes extracts and oils does not exceed 0.35%.

Air pollution and health effects on people living in Kruja region

ARDIT PASHA; EDLIRA NEZA

Background: Air pollution contributes to mortality and morbidity. Air pollution has both acute and chronic effects on human health, affecting a number of different systems and organs. It ranges from minor upper respiratory irritation to chronic respiratory and heart disease, lung cancer, acute respiratory infections in children and chronic bronchitis in adults, aggravating preexisting heart and lung disease, or asthmatic attacks. According to the studies the effects have been seen at very low levels of exposure. Sources of pollution in Kruja region are cement factories, lime kiln and automobile vehicles. Air pollutants, such as carbon monoxide, sulfur dioxide, nitrogen oxide, ozone and respirable particulate matter are among the problematic air pollutants. Objective of this study was to measure the most important air pollutants in the region of Kruja and to evaluate the frequencies of hospital admissions from 2010 to 2017 in the region.

Materials and methods: We used the analysis done by the Environmental Studies Institute for the air pollutants in Kruja region and also the hospital admission in the region from 2010-2017.

Results: According to the results of air analysis done by Environmental Institute the concentrations for the air pollutants; NO₂, SO₂, O₃ were twice higher than the allowed limits. From 410 hospital admissions in the Kruja Regional Hospital the higher frequencies were due to pulmonary diseases such as Chronic Obstructive Pulmonary Disease (COPD) followed, bronchial asthma and chronic bronchitis.

Conclusion: A significantly increased number of hospital admissions were observed especially after 2010. Also the number of patients with pulmonary diseases was doubled during the time. The median age of patients was decreased.

Evaluation of antibiotic use in the Urologic Surgical Ward in the University Hospital “Mother Teresa”

SILVI BOZO¹; ARJAN HARXHI²

¹ Faculty of Pharmacy, Catholic University “Our Lady of Good Counsel”, Tirana, Albania

² Service of Infectious Diseases, University Hospital Centre, Tirana, Albania

Objective: Antibiotic prophylaxis is used to minimize infectious complications resulting from surgical procedures. Side-effects and development of microbial resistance patterns are risks associated with antibiotic use. Therefore, the antibiotic use should be well considered and based on high levels of evidence. In this study, all available evidence regarding antibiotic use in urology is gathered, assessed, and presented in order to make choices in the use of antibiotic prophylaxis on the best evidence currently available.

Methods: A point-prevalence study was performed on May 2017 in the urologic surgical ward at THE University Hospital Centre “Mother Teresa” in Tirana, Albania. All inpatients on the day of the survey were included in the analysis. Standard published guidelines were used to evaluate the appropriateness of indications for antibiotic prescription.

Results: 38 patients were included in the study. Male patients were the majority at 84.2%. The age range was 18-85 years, with a mean of 63.7 ± 17.4 . All patients received prophylactic antibiotics regardless of the type surgery done. The majority of the patients, 63.7% received antibiotics post intervention. Cefazolin was the commonly given antibiotic (47.2%), followed by Gentamicin and Levofloxacin in (13.2%) of cases respectively. Written indications in medical charts were available in 39.3% of cases.

Conclusion: Antibiotic use is still a challenge in this hospital with over use of prophylactic antibiotics without obvious indications. Antibiotic stewardship needs to be addressed dhe National protocols needs to be written in order to avoid serious drug resistances as well as costs implication.

Keywords: antibiotic, prescription, prevalence

Optimization of yield and the impurity of synthesized aspirin by chromatographic method

E.HALOCI¹; E.GOCI²; R.SHKRELI²; V.TOSKA¹

¹ Universiteti Mjekesise, Tirane, Departamenti i Farmacise

² Universiteti Aldent, Shqiperi, Fakulteti i Farmacise

Student E.Metallari

Introduction: The history and discovery of analgesic effects of aspirin is ancient and is mentioned by the prominent Greek physician Hippocrates in relation to the use of salicine (natural ingredient of *Salix Alba*) during the synthesis of salicylic acid by German scientists in 1832 and subsequently synthesis That aspirin (acetylsalicylic acid) of this acid from Felix Hoffman in the city of Bayer. Peripheral analgesic was widely used in antithrombotic activity. During the aspirin synthesis the problems encountered today are a) salicylic acid residue which is considered as the main cause of impurities for tablet preparation and its consumption, b) the problem of yield of this reaction. This study aims to realize the synthesis and aspiration process with high efficiency and purity.

Method: in this study, diurnal changes were made from the parameters of the aspirin synthesis parameters such as ambient temperature, magnetic stirring, reduction of the amount of water during the crystallization of crystals obtained and the process of recrystallization of the initial synthesis product Aspirine up to 4 times. Identification and quantitative determination of the formed product was carried out by means of thin layer and volumetric layer chromatography.

Results: During the development of the work it resulted that the recovery of the product was at levels of 80-90%. Combining these aspirin synthesis protocols was achieved optimization of this process up to 90% pure product. conclusions Improvement of the method proved to be more efficient in aspirin synthesis. Despite the simple nature of the esterification reaction of aspirin there are still possibilities and ways to optimize the productivity and purity of the synthesized aspirin.

Keywords: Aspirin, optimization, synthesis.

References:

Bayer HealthCare LLC. (2008). The History of Aspirin. Retrieved April 4, 2008,

General Chemical. (2003). Material Safety Data Sheet Sulfuric Acid. Retrieved April 5, 2008,

Sciencelab.com. (2005). Material Safety Data Sheet Methyl salicylate MSDS. Retrieved April 5, 2008,

Mellitus Diabetes, incentives and medicine in the Korces region

E.HALOCI¹; E.GOCI²; R.SHKRELI²; S.BOZO³

¹ Universiteti Mjekesise, Tirane, Departamenti i Farmacise

² Universiteti "Aldent", Shqiperi

² Universiteti "Zoja e Keshillit te Mire", Shqiperi,

³ Student Theodhora Kosta

Introduction: Recently, there is a high incidence of diabetes mellitus. Inadequate nutrition, obesity, overweight, hormonal foods, sedentary life, are thought to be risk factors. The increase in diabetes is also reflected in the list of reimbursed medicines and the financial cost of this category. WHO in the global report 2016 states that the annual worldwide cost of the diabetes mellitus goes to 827 billion US \$. To evaluate the situation, the study of the antidiabetic consumption reimbursed in the last three years in the Korca region was taken into consideration. In parallel, a type questionnaire was developed for diabetic patients who appeared in the pharmaceutical network to study some of the risk factors.

Method: In this study, retrospective study methodology was used for the last three years and combined with the implementation and elaboration of the results obtained in this region.

Results: From the reimbursement consumption data in the Korca region, the number of diabetic patients receiving reimbursement was about 6,000 patients per year, with an additional 720 patients in the period 2014-2016 with an average reimbursement value of 106 mln lek, out of which 80% Insulin, 10% metformin 5% total amount of glibenclamide. The questionnaires showed that out of the 70 patients surveyed in March-April 2017 (30-80 years), 40% of them had family history of illness and had a period of treatment of 15 years.

Conclusion: There is an increase in the number of patients in recent years, in parallel high consumption of antidiabetic drugs, which is associated with an increase in the cost of treatment. Also in the group of patients asked is a high percentage of inheritance factor, obesity and smoking. This situation implies the necessity of raising public awareness of the risk factors and the monitoring of this pathology.

Keywords: Diabetes Mellitus, Consumption, Antidiabetic.

References:

World Health Organization: Diabetes Mellitus: Report of a WHO Study Group. Feb 2016
DRSKSH Korce

Development of pharmacy network in Albania last years

E.HALOCI¹; E.GOCI²; E.MUSTAJAJ²; AFRIM TABAKU²

¹ Universiteti Mjekesise, Tirane, Departamenti i Farmacise

² Universiteti "Aldent", Shqiperi

Student Jesmina Kalushi

Introduction: The pharmaceutical network in Albania has had its own developmental dynamics, starting with open pharmacies from graduates abroad, with the opening of schools and university branches, and then the liberalization of ownership, opening and increasing the number of graduates. This study has been done with the aim of providing a comprehensive approach over years of growth and development of the pharmaceutical network such as pharmacy and pharmaceutical warehouses.

Method: In this study, the methodology of retrospective study and collection of data from artifacts, the official website of order of Pharmacist and the National Licensing Center were used.

Results: The data showed that the number of pharmacies has increased, with the highest number of districts in Tirana, Durres, Elbasan, and the number of licensed pharmacists since 1995. Currently, this number is 2459. Number of pharmaceutical stores After a rapid increase in the years 1999-2006, the current change in legal changes and their profit margin is reflected in the decrease of their number.

Conclusion: The liberalization of pharmacy opening up, the abolition of the long-term conditionality, the growth of graduates as a result of private education accelerate the increase in numbers of pharmacies and licensors. However, in the last 2-3 years as a result of the marginal reduction but also the unbounded opening, there has been a fall in the opening of pharmaceutical stores and pharmacies.

Keywords: pharmacy, pharmaceutical warehouse, history.

Reference:

<http://www.qkr.gov.al/kerko/kerko-ne-regjistrin-tregtar/kerko-per-subjekt/>

<http://www.ufsh.org.al/home>

B. SESSION OF PHYSIOTHERAPY AND NURSING

Abstracts

Dementia and Alzheimer's disease

JUXHIN THANASI; ELSID SULAJ

Department of Nursing and Physiotherapy, Faculty of Medical Sciences, Aldent University

Introduction: Alzheimer's causes problems with memory, thinking and behavior. In the early stage, dementia symptoms may be minimal, but as the disease causes more damage to the brain, symptoms worsen. Under Fizio-Vizion service led by P.T Juxhin Thanasi have been treated at home 12 cases of individuals suffering from Alzheimer's for several years.) The rate at which the disease progresses is different for everyone, but on average, people with Alzheimer's live for eight years after symptoms begin. While there are currently no treatments to stop Alzheimer's disease from progressing, there are medications to treat dementia symptoms. In the past three decades, dementia research has provided a much deeper understanding of how Alzheimer's affects the brain. Today, researchers are continuing to look for more effective treatments and a cure, as well as ways to prevent Alzheimer's and improve brain health.

Methods: The methods applied in this study are descriptive and analytical where information is taken from scientific literature which has been assimilated during the learning process.

Results: There was noticed that people who attended physiotherapy classes were often much more physically and mentally maintained than those who rarely attended physiotherapy.

Patients who were under other medical services such as ergo-therapy and logopedy have greater advantages in prevention from physical trauma and motoric issues.

Conclusions: Probable Alzheimer's Disease – if the physical exam and test results match the criteria for Possible Alzheimer's Disease – if the results demonstrate that the person has dementia, but it may differ from that of typical AD or be caused by another disease other than AD. Alzheimer's is a terminal illness, and no cure is currently available.

Keywords: Health, terminal illness, examination, diagnostification, Physical Therapy, season, test, autopsy

Carpal Tunnel Syndrome (CTS)

MEGI KOKA; FREGEN DEDJA

Department of Nursing and Physiotherapy, Faculty of Medical Sciences, Aldent University

Introduction: Carpal Tunnel Syndrome is a disability that affects almost 3.8% of the general population. It is one of the most frequent neuropathic syndrome that compresses median nerve, in 90% of diagnosed cases. CTS can provoke some symptoms that may lead to neuro-motoric dysfunctions such as: numbness, tingling, pain and weakness. Starting from symptomatology and number of cases that are increasing, the purpose of this study is to organize anatomical information, symptomatology, orthopedics tests and treatment protocol of this syndrome according to AAOS (American Academy of Orthopedics), concerning this diagnosis

Methods: Implementation of examination and therapeutical protocols during 6-8 weeks after first signs of symptoms, based in official protocol of AAOS (American Academy of Orthopedics) which is taken as a reference from many EU countries.

Results: With a proper and correct examination of symptoms since their beginning, and an adequate conservative treatment, a quick improvement of patient is gained, evitating so even surgical intervention in carpal region.

Conclusion: We notice that, as we make a good and quick intervention, the prognosis and minimizing the neurological symptoms will be very effective, taking the patient away from surgical involvement.

Keywords: carpal tunnel, rehabilitation, physiotherapy, median nerve.

Frozen shoulder, diagnosis and its rehabilitation

ROXHENSA SULA; ONELDA GJONAJ

Department of Nursing and Physiotherapy, Faculty of Medical Sciences, Aldent University

Introduction: Kapsuliti adhesive or frozen shoulder are two terms that are used to describe a painful and stiff shoulder, caused by inflammation of the shoulder capsule, where the art.glenohumeral surrounding tissue becomes red and stiff, consequently limited movement and causes chronic shoulder pain. Pain is usually constant, worse at night. The reason for this study is to make known the symptoms of this pathology, when to turn to the doctor for appropriate examinations, the role of physiotherapists for the rehabilitation of kapsulitit adhesive and adequate information to patients.

Method: Kapsuliti adhesive is a pathology which has the highest incidence among women aged around 40-60 years. To make a well-defined assessment of frozen shoulder should know the anatomy of the glenohumeral articulation, bone structures and soft tissues, innervation and vascularization. Special attention should be paid to differential diagnosis to be made to this pathology so that the rehabilitation to be correct and effective. physiotherapy rehabilitation kapsulitit adhesive aims to return the patient to perform activities of daily life.

Results: A physiotherapist, who knows this pathology, has a major contribution to active mobilization of assisted or passive shoulder to allow the stored arc of movement.

Conclusions: physiotherapy methods as jonoforeza, ultrasound and cold procedures can significantly influence the improvement of articular motion and reducing edema. Physiotherapy should be continued just after the two procedures in scarification (with anesthesia) or artroskopisë to avoid reshaping adherence.

Keywords: kapsuliti adhesive, symptomatic, differential diagnosis, rehabilitation

Nursing care in Juvenile Rheumatoid arthritis

ALBJONA GOÇI; MIRVA HOXHA

Department of Nursing and Physiotherapy, Faculty of Medical Sciences, Aldent University

Introduction: A family experience motivated me to explore more about this chronic progressive systemic pathology of connective tissue manifested by destructive changes in the joints and sometimes affects the eyes and internal organs. Juvenile rheumatoid arthritis is an autoimmune disorder during the course of which the body breaks some of its own cells and tissues. For rheumatoid arthritis aetiology has different claims by different researchers. Researches indicate an inadequate immune response of the organism with the undefined antigen. Others suspect of environmental factors such as viruses that may aggravate the condition of children genetically susceptible.

Method: Presentation of a clinical case diagnosed with rheumatoid arthritis; search on books and the Internet; consultation and training sessions with specialists.

Results: The onset symptoms of the disease are: joint pain, morning solidification, edema, redness and heat of the skin on the joints, sub febrile temperature, fatigue and anorexia. Joint Injuries are the main manifestations of RA. In most cases many joints are affected. The most affected are the small joints of the hands and feet.

Conclusion: Along with a detailed history, complete physical examination and evaluation of symptoms, blood tests and X-rays are needed to confirm the diagnosis. Early diagnosis and treatment are essential to reduce the damage, keeping the joints moving, strong muscles and limbs in a good position.

As a result of diagnosis and early treatment of this disease and in collaboration with other specialists and professional work, there will pretend alleviation of signs and symptoms of illness, disability avoidance, training and recovery of patients in the workplace and in life activities.

Keywords: rheumatoid arthritis, joints.

Nursing care in patients with Psoriasis Vulgaris

BRIXHILDA MIFTARI; MIRVA HOXHA

Department of Nursing and Physiotherapy, Faculty of Medical Sciences, Aldent University

Introduction: Psoriasis is a skin disease that is characterized by the creation of inflammatory elements raised in the skin surface covered by skuama (scaled) due to the hyperbolic multiplication of epithelial cells. Today, according to statistics suffer about 2-3% of the population. Fortunately, in most cases the disease does not cause health problems in general, but localized to the skin and patients worried more psychologically than health. If epidermal cells move from the base to the surface of the skin for 26 to 28 days on skins with psoriasis do for three to four days. About 2% of the european population have a psoriatic skin that is thought to come from a hereditary defect of keratin production. The primary cause is unknown, although it is thought that a combination of several factors can affect the appearance and aggravation of psoriasis. Trauma, infections, anxiety, stress, hormonal seasonal changes exacerbate the situation. Its beginning appears from age 15 to 50 years. The goal of treatment consists in slowing down the epidermal reproduction. There is no specific cure.

Method: Patient's Presentation KS 54 years old diagnosed with psoriasis vulgaris and lesions throughout the body.

Result: Psoriasis is a non-infectious inflammatory skin disease that comes as a result of the growth of epidermal cells 6 to 9 times more than the normal. The cells in the basal stratum divide more quickly and new emerging rapidly in the skin surface in the form of tiles. The sites more predisposed are scalp, elbow, knees, the last piece of cord, genitals.

Conclusion: Psoriasis is a disease that treated but not cured. Recovering from this pathology varies from patient to patient. The principal treatment consists in removing the scales associated with a shower. The different oils added to the bath and a soft brush is used to remove the scales. After removing the scales applied lotions with content of salicylic acid.

Nursing Care focuses on:

- Recognizing and explaining the patient's illness and their families.
- Preservation of skin integrity.
- Ensuring the physical image
- Monitoring and managing potential complications.
- Patient's education for self-care.

Keywords: psoriasis vulgaris, pustular psoriasis, skin squamous.

Nursing care for the patient in Hemodialysis

ELISA SINOMATI; MIRVA HOXHA

Department of Nursing and Physiotherapy, Faculty of Medical Sciences, Aldent University

Introduction: Dialysis is a treatment that partially replaces renal function and required when the kidneys are not able to work normally (renal failure), especially when renal function komprimohet up to 85-90%. If not applicable, patients with renal insufficiency fluid accumulates besides the toxins that can be fatal. Treatment provides blood filtering the water and refused substances from the body leading to an improvement of the patient's welfare with renal disorders. Dialysis, exactly how healthy kidneys contributes to maintaining health and balance the body.

Specifically dialysis serves to:

- Elimination of substance rejected by the body as mineral salts, etc., in order to avoid their accumulation in the body.
- Maintaining the balance of essential substances like blood potassium, sodium and Bicarbonates.
- Helps to keep blood pressure under control

Currently there are two types of dialysis: Hemodialysis and peritoneal dialysis

Method: The clinical case study (patient MX 67 years) in hemiodialysis service during hospital practice in March 2017

Result: During the data collection phase (not for the patient in question) is considered as an important part of the nursing process we concluded that the causes that lead to a kidney labor shortage may be different but it can allow the patient practicing different physical activities, work or study and make a living out of active dedicates hours of therapy.

Conclusion: Hemodialysis is an effective therapy that increases the quality of life of patients with renal insufficiency. Effective health education of the patient by the medical staff, patient and family cooperation with the staff as well as an adequate nursing care leads to increased life expectancy of these patients. Although this therapy should be performed every 3-4 days, patients can make an active and regular life on other days.

Keywords: hemodialysis, peritoneal dialysis, fistula, catheters, hemodialysis apparatus of disinfectant.

Nursing care for patients in Onkogynecology

OLIGERTA BECA; MIRVA HOXHA

Department of Nursing and Physiotherapy, Faculty of Medical Sciences, Aldent University

Introduction: Breast cancer is a growing pathologies and women after lung cancer is the second leading cause of deaths from cancer diseases. The incidence of breast cancer has been increasing in recent years but mortality from this disease has been decreasing due to early screening and new and effective treatments. The etiology of most cases of breast cancer is unknown. As known risk factors we can mention sex female, family history of breast cancer, menarcheage (menses) early, late menopause, the greater maternal age at first birth, diets rich in fats, repeated ionizing radiation breast region for medicinal purposes (mastitis) or diagnostic (frequent mammography and radiography of the chest, genetic mutations such as BRCA 1/2 etc. Breast cancer is characterized by a long period of sub-clinical. Since it becomes accessible to reach size of at least 1 cm.

Method: Clinical Case Study (MC patient. 35) in the service of Oncology, Gynecology ward of a patient diagnosed and treated Ca Mama sinistra which hospitalized again with vaginal bleeding and some suspect the ovaries.

Result: The patient in question was subjected mastectomy with axillary lymph nodes drain on March 16, 2016 and then chemotherapy. Hospitalized with vaginal bleeding associated with pelvic pain, with some suspect the ovaries performed surgical removal of reproductive organs. Nursing care treatment consisted of aseptic surgical wound, pain management and psycho-emotional support.

Conclusion: Patients with breast cancer stage 0 must undergo a physical examination every 6 months to 5 years, and thereafter every year. Similarly, every year should be realized mammography. Patients with stage I breast cancer should undergo a physical examination every 4-6 months for 5 years and annually thereafter. Must perform mammograms every year in both breasts if they become conservative surgery and remained in the bosom of the case have been subjected mastectomy.

Ro-graph pulmonary every nine months. They must also perform gynecological examination every 12 months after such genetic mutations BRCA ½ associated with ovarian cancer. It should be shintigrafia skeletal every 1-5 years.

Keywords: mastectomy, BRCA½, cancer ovaries, mammography.

Nursing care for patients in Hematology (Cancer Leukemia Sanguinem)

XHESIKA KAPLLANI; MIRVA HOXHA

Department of Nursing and Physiotherapy, Faculty of Medical Sciences, Aldent University

Introduction: Leukemia is a type of blood cancer as a result of anomalous multiplication, unstoppable and invasive malignant cells of hematopoietic origin that infiltrate the spinal marrow, peripheral blood, organs and other tissues. These last 20-30 years there have been advances in its treatment. In relation to all cases there is now a larger longevity. The origin of most cases of leukemia is unknown. As known risk factors may include: genetic risk factors, exposure to X-rays and other forms of radiation (atomic bombers), certain chemicals such as the benzene's vapor, pesticides and certain viral infections, exposure to chemotherapy and other chemicals. Children and adults who are being treated for other cancers are higher occurrence risk of a second cancer. Also, more affected are the adults than children more often men than women.

Method: The clinical case study (patient EK 17 years old) in the internal diseases department at the service of Hematology the patient diagnosed and treated with Ca Sanguinem Leukemia which was hospitalized with epistaxis, bleeding from the gums, face and arms swelling.

Result: The patient began chemotherapy. Thanks to the care and specific therapy is discontinued hemorrhage from the gums and swelling is reduced.

Nursing care consisted in making intra venous blood analysis, informing the patient and family to follow each stage as directed by the doctor. Psycho-emotional support, clarification of mental confusion was an important stage of care.

Conclusion: Patients with leukemia should be subjected to a physical examination every 6 months to 5 years, and thereafter every year. So the patient is given chemotherapy pills for 2-3 years. The medications most commonly used are Adriamicine, Oncovin etc. The patient must stay in contact with doctor about any concern should be also be kept in check through examinations as whole blood, radiotherapy, biopsy and lumbar puncture.

Keywords: hemorrhage, chemotherapy, transfusion.

Physiotherapeutic treatment of Scoliosis patients

SILVIO SELFO; FREGEN DEDJA

Department of Nursing and Physiotherapy, Faculty of Medical Sciences, Aldent University

Introduction: Scoliosis is a non-physiological spinal drift in the three planes of motion, which affects 2% of women and 0.5% of males. It brings postural changes that affect the musculoskeletal system and also the pulmonary vital capacity and functions. Recently, there has been a significant increase in the number of patients affected by this diagnosis, especially in adolescents and young ages. This situation has increased the sensitivity to this phenomenon of parents, physical education teachers and physiotherapists. The aim of this topic is to inform and provide as much information as possible regarding the prevention, diagnosis and physiotherapeutic treatment of scoliosis patients.

Method: Summary of the anatomical information and the functional changes occurring in the patients diagnosed with scoliosis. Information on preventive measures. Description of a diagnostic and therapeutic protocol

Results: An information campaign of physical education teachers in primary or secondary schools, parents and physiotherapists would affect the early diagnosis of scoliosis patients, and reduction of cases.

Conclusion: Sensitive campaigns help prevent the number of people affected by scoliosis. Patients who are diagnosed with scoliosis should be treated as efficiently as rehabilitative.

Keywords: scoliosis, rehabilitation, physiotherapy.

C. SESSION OF DENTAL SCIENCES

Abstracts

Management of fear and anxiety among children in dental cabinet

ANIDA CUNI; XHESIKA ZHELEGU; GRETA KUPI

Faculty of Dental Sciences, Aldent University

Introduction: Dental fear is one of the most common fears in children. As anxiety and fear in the dental cabinets lead to avoid the examination, this will lead to worsening of oral health. Children with fear and phobia from the dentist try to avoid going to the dentist in the case of minor problems where they can be avoided.

Purpose: Proper management of the child's attitude towards fear from the dentist helps in the proper treatment of bladder disease, its complications, and the proper treatment of orthodontic treatment.

Methods: In order to have the right information we studied about 10 different contemporary literatures. Also in those literatures review was considered the experience and study of the DFA organization. To complete the study, we analyzed a series of studies published Online about the fears and anxieties that children felt at the dental office.

Results: The research revealed multiple manifestations and impacts of DFA, including immediate physical reactions (crying, screaming, and shivering), psychological responses (worry, upset, panic), and uncooperativeness in dental treatment. Testimonials from children, adolescents, their parents and dentist experience suggested diverse origins of DFA.

Conclusions: DFA about children and teenagers has manifested many aspects that became apparent only through the use of social hospitals. Dental fear as one of the specific fears is almost always present in preschool and school children. Choosing the right way to treat will lead to anxiety and fear of children.

Keywords: children, dental fear, dental anxiety

Description of antibiotics in dental clinics/ antibiotic-resistance

**ILDA CUNI*; PRANVERA TAHIRI; ENXHI BODINAKU; VJOLLCA CELMANAJ; MIGENA SABAHI;
SUELA SKUQI; DR. BLERTA KIKA**

Faculty of Dental Sciences, Aldent University

Introduction: Antibiotics are a twentieth-century revolution in treating different dental infections and not just. But antibiotic-free use nowadays is a worldwide problem. In dental practice according to studies that have been made, the use of antibiotics should not be a work practice, except that cases in maxillo-facial surgery are quoted in a scientific article in the Italian magazine "MINERVA". Giving antibiotics is not automatic because the addition of antibiotic-resistant strains is causing failure in treatment and has a major impact on the ecological situation.

Aim: Recognize the indications of use in dental pathologies.

Methods: In the study, about 10 different contemporary literatures have been studied in cases of antibiotic use. Also in the literature, antibiotic resistance aspects have been studied. The working group analyzed several scientific articles and plenty of books, magazines, and interviews in which antibiotics and antibiotic resistance were discussed and studied.

Conclusions: Antibiotics are often indicated in dental practice. According to studies it is estimated that 10% of all antibiotic prescriptions are related to dental infections. It is very important that all dentists have the chance to recommend antibiotics for use under the motto: "Use less to give better results" and "Giving antibiotics is not automatic." Informing and educating the patient about personal and oral hygiene is essential in preventing and eliminating infections. The patient should be informed of the indications and contraindications of the use of antibiotics.

Keywords: Antibiotics, antimicrobial stewardship, prescribing, antibiotic resistance, dentists

Periodontal disease in heavy serious occupations (mining)

GENTIANA KERI*; DENIS MIFTARI; SIGI HAXHIAJ; DR.EDLIRA DEDAJ

Faculty of Dental Sciences, Aldent University

Introduction: Periodontal diseases come as a result of the disruption of the balance between the microorganisms and the human organism. The factors that influence the appearance of periodontal disease are numerous and their action is complicated. Factors involved are divided into general and local factors. Their interaction is very important for the treatment and progression of the disease.

Material and method: The subjects were subjected to a questionnaire that was distributed to a group of 100 individuals of male sex, aged 22-55, divided into two groups according to the area where the mine is located, 50 individuals in the Kukës mine and 50 other individuals in the Fushë Kruja mine. The questions inform us about the conditions in which this category of workers work, the level of stress, the care and oral hygiene care.

Results and discussions: Because of the lack of oral hygiene, many individuals appeared with hyperemic gingiva and with generalized periodontal problems or in certain regions. These oral cavity diseases were due to the little knowledge they had about the ways of maintaining the hygiene and the complications that lead to the oral cavity and the entire organism. There was also a high level of stress, residues of chemical substances after explosion inside the mine, high level of temperature and moisture.

Conclusion: It is very important to keep the subjects informed about the necessity of maintaining a correct hygiene, as well as the prevention and timely treatment of periodontal diseases. After elaborating the data obtained from the structured questionnaires, it was concluded that all workers have high levels of stress, lack of oral hygiene and knowledge on how this hygiene is maintained.

Keywords: Examination, periodontal disease, profession, hygiene.

Dental trauma

MARINELA MALÇI*; ARJOLA ALUSHI; VIONA MALOKU; DR.SHK. EDLIRA DEDAJ

Faculty of Dental Sciences, Aldent University

The purpose: To identify the etiological factors of dental traumas and the treatment process of the most common cases at the clinic. We also aim to inform each individual what to do when they face an accidental dental trauma.

Introduction: Dental trauma means the damage of the teeth with/out the involvement of periodontal, alveolar process and soft tissues. Given that we have a huge variety of dental traumas we have the need to classify them in a simpler and more practical way so we can build an efficient plan of treatment within the shortest time possible. Traumatic events can cause psychological, aesthetically and functional effects, which should be considered as dental emergencies.

Methods: The materials that we have used in our presentation are taken by ten different literatures, dental magazines, scientific references and websites. Presentation of two clinic cases, where we can evidence the all examination, diagnosis and treatment plan.

Conclusions: The facial region, mainly the oral cavity often is a target of physical traumas because of its anatomical position. According to certain protocols, dental traumas are considered as dental emergencies and should be taken care of immediately. Individuals with expressed over-jet or maxillary prognathism appear to have a higher risk at experiencing trauma. Radiological examinations play a key role in establishing the diagnosis and at the follow-up of the assigned treatment.

Keywords: Trauma, teeth, etiological factors, fractures.

Determination of the working length during endodontic procedures

ENDRIT HYSENAJ*; ARJOLA SELITA; DR. EDLIRA DEDAJ

Faculty of Dental Sciences, Aldent University

Purpose: To inform briefly on the importance of determining the working length of root canals, as well as to present various methods of measuring the working length.

Introduction: Determining the exact working length is one of the most critical steps in endodontic therapy. A definition of the working length is: "distance from the coronal reference point to the point where canal preparation and obturation should end" known otherwise as "terminal stop".

Material and methods: In this study were taken in consideration 15 literature sources from books, scientific articles and scientific researches.

Results and discussions: A deficient working length results in underfilling and vice versa, which often end up in failed endodontic treatment. Electronic apex locators as a novelty in dentistry are increasingly being preferred in comparison to other traditional methods (dental radiographs, etc.) presenting with an over 90% accuracy but definitely having its own limits.

Conclusion: For many years radiological techniques have been used conventionally as main tools in endodontic measurements by dentists. In the recent years, with the progress of studies on canals length measuring and the emergence of electronic apex locators are provided more reliable tools in routine endodontic procedures. It is suggested that a combination of these methods are expected to give successful clinical endodontic results in the future.

Keywords: Endodontic, Root Canal, Dental Radiography, Apex Locator.

Evidence of skeletal class by Steiner Analysis in students of the Aldent University

XHESJANA DEDJA* ; DR. ALBA KOSHOVARI

Faculty of Dental Sciences, Aldent University

Introduction: Cephalometric analysis is the study of the head radiography in order to observe the craniofacial complex.

Purpose: Recognizing the importance of cephalometric analysis not only as a diagnostic tool but also as a key factor in treatment planning. Presentation of the results found in Steiner cephalometric analysis among the students of Aldent University.

Materials and methods: Literature review through the search engine PubMed, of scientific articles which represent important data on the benefits of lateral radiograph of the skull in orthodontic practice. Quantitative study was done on 30 students of Aldent University randomly chosen. Cephalometric analysis of their radiographs was done using an orthodontic app and creating graphics by organizing data using software program Excel.

Results: From the data we received, it results that in 30 patients, 9 of them belong to a first skeletal class, 14 of them a second class and 7 of them belong to a third skeletal class. As to the definition of the facial type, SN[^]GoGn measurements found that in 17 individuals there was a brachyfacial type, in 7 of them a doliofacial type, and the other 6 individuals resulted in the norm.

Conclusions: Cephalometric analysis is a fundamental method for predicting the growth, prevention or stabilization of anomalies when they are caught in a timely fashion. It also helps determine the skeletal and facial type.

Keywords: Cephalometric analysis , diagnosis , treatment planning, skeletal pattern, facial type.

Bruxism and his prosthetic treatment

ERIKSELA HOXHA*; **IRMA SANA**; **ILDA KUQI**; **PROF. DR. RUZHDIE QAFMOLLA**

Faculty of Dental Sciences, Aldent University

Introduction: Bruxism is a strong unconscious teeth grinding activity which appears to take place during day and night. Otherwise, it is called the “bite symptom” that occurs during the mandibular movement. Bruxism is known to be labeled as a parafunctional habit activity.

Purpose: The goal of this research paper is to understand and determine the causes that are associated with bruxism and the ways that this condition can be treated.

Materials and methods: For this study were used sources of literature, books, magazines, and scientific articles.

Conclusions: An examination of the literature shows that several causes of bruxism are: Stress, non-occlusion parafunctional habit, interferences and premature contact. Establishment of an accurate diagnosis and determines the ways of treating bruxism. Bruxism can be treated in many ways such as: Therapeutic treatment, prosthetic treatment and medicated treatment. This oral parafunctional habit activity can also be treated by using a nightguard mouthpiece which can lasts from three to six months.

Keywords: bruxism, diagnosis, causes, treatment.

The diagnosis of the odontogenic cysts

SIGI HAXHIAJ^{*}; GENTIANA KERI; DENIS MIFTARI; Dr. NINETA FINO

Faculty of Dental Sciences, Aldent University

Introduction: Odontogenic cysts are chronic benign pathologies. Radicular cyst is a pathological cavity coated with a epithelial sac and contains serous liquid colored from yellow to brown, which may have cholesterol crystals and cell materials. Cysts varies in size from 0.5cm to inclusion of a complete jaw body resulting in bone destruction. Making the diagnose is difficult because they have a quiet development. Early diagnosis of the cyst is the result of objective examination intra and extraoral and also careful observation of the radiographies which are evaluated in every detail and information.

Purpose: Reassertion of diagnostic steps for establishing the diagnosis and planning treatment of radicular cyst.

Materials and methods: This presentation was done working with local literature, international and contemporary publications. The clinical case of a 55 year old male A.M patient, of the Iranian community, resident in Albanian, clinically examined with all the examination methods and with complementary examination, was diagnosed with radical odontogenic cyst.

Results: 60% of the odontogen cyst encountered in maxilla and mandible are radicular cysts. Cysts can be founded 3 times more in the maxilla than in mandible and often in the frontal maxillary region. Recognizing the symptoms of these cysts, the knowledge we have of their etiology and of the predosposing factors for the position that has the radicular hair helps the doctor to correctly determine the diagnosis of this cyst.

Conclusion: A careful examination assists in the early diagnosis of odontogenic cysts. Accurate diagnosis, determines appropriate and successful treatment.

Keywords: cyst, diagnosis, examination, maxilla, mandible, asymptomatic.

Ankylosis

FLORINDA NOTTI*; ROBERTA TEODORI; DR.SH. EDLIRA DEDAJ

University of Dentistry Science, Aldent University

Introduction: An ankylosis is the joining of the cement with the alveolar bone with the absence of the periodontal ligament. The etiologic factors are different: from occlusion, tooth reimplantation, periapical chronic inflammation, and local metabolic changes may cause tooth ankylosis in some cases. It is characterized as the pathology of cement that results in root resorption and its replacement by bone tissue. The alveolar bone represents the result of the formation process and bone resorption. This phenomenon occurs throughout life. The osteoblast-osteoclast ratio where osteoblasts produce an organic matrix which, after a calcification process, will release the bone. Ankylosis is a rare situation that happens more in temporary dentition than in permanent dentition. Most affected is the second mandibular molar of temporary dentition.

Objective: To identify the causes of ankylosis and treatment methods for each of the specific cases, such as dental replanting, trauma from occlusion, and periapical chronic inflammation

Materials and methods: 15 sources of literature, various articles books, and study of a specific clinical case that was treated with surgical, orthodontic interventions with the placement of the functional apparatus, the space preserver, and the implant placement resulting in the restoration of all the functional and aesthetic factors of the patient.

Conclusion: Some of the etiologic factors that may cause ankylosis are classified in 14% reimplants, 10-15% traumas, 8-10% chronic periapical inflammation. From surgical, orthodontic treatment and placement of the implant in the clinic case presented resulted in the patient's choice both in functional and aesthetic terms.

Keywords: ankylose, resorbable, cement, alveolar bone.

Fluorine, its balance in organism and use in the prophylaxis of caries

RESUL MULLA*; ARION XHEMALI; SAMI SELIMI; DR.SH. EDLIRA DEDAJ

Faculty of Dental Sciences, Aldent University

Introduction: Fluoride is one of the microelements of the Mendeleev periodic system, which is very necessary for human organism. Listed in the VII group of halogens, it is one of the microelements that remineralizes hard tooth tissues and prevents caries. Today's medicine goes hand in hand with the principle: "It is better to prevent the disease than to cure".

Purpose: This study aims to identify and determine the positive effects of fluoride, the application and the ways of taking it, as well as the doses allowed by WHO.

Materials and methods: For the realization of this study, literature sources were used: books, scientific articles, data obtained from publications of the American Dentists Association (ADA).

Results: Shifting from medical dentistry to the preventive dentistry is a difficult one, which is related to oral health education. To reduce the caries morbidity and other problems associated with treatments, we must use fluorine. Making people more aware about fluoride treatment can obtain better oral health.

Conclusion: Fluoride application is quite important and significant in lowering carious morbidity. It is important to know fluorizing sources and the combined use of these resources.

Keywords: prevention, fluorine, takeover sources, doses.

Difficulties in communication during the treatment of patients with disability in dental cabinets

GERTA KUPI; SEAD BARAKU; JONA KOÇI; MIGENA TABAKU; PAMELA KOÇEKU

Offering safe, convenient and economic oral service, infrastructure as a whole associated with oral service is a prerequisite, a key factor in the success of communication in oral medicine. Inadequate infrastructure, which does not cater adequately to the needs of disabled persons, including infants and the elderly, constitutes one of today's barriers to effective and promising communication for a successful oral service. Therefore systems and services in dental cabinets should be designed for people with disabilities and for people who have problems related to mobility or access to information. People with limited abilities need to be able to enjoy the same freedom to take oral service.

The first obstacles are the various problems of access to this service, people with disabilities can be affected in any part of the road, whether in terms of access to information, local transport, accommodation, participation to facilitate the receiving of oral service as spectators or participants.

Primary data are provided in dental cabinets in Tirana. The tool used for the provision of data is a survey conducted with stomatologists that own a dental cabinet and offer dental services in the private sector.

The sample was randomly selected and it's not probabilitary, it consists of 30 dental cabinets. A non probabilitary sample was selected as a result of a choice that does not provide a basis for evaluation: how well the characteristics of choice averages the characteristics of the population from which this choice was made. The reason for choosing this sample is based on the flexibility and cost.

Keywords: communication, patient with disability, dental cabinets.

Deep and brush zirconia K2 zircon liquid

DONATELA BENDAJ; KEJDI BIFSHA; MSC AJOLA NASTI

Faculty of Dental Sciences, Aldent University

Introduction: In recent years, aesthetic dentistry has boomed to a great extent as patients' demands have increased greatly and developments in approaches and new materials have improved clinicians abilities in providing aesthetic treatments. Due to the particular importance of aesthetics in modern clinical dentistry and high expectations of patients regarding this issue, and also limited published scientific research on zirconium coloring; more comprehensive researches are needed in this field. Introducing the coloring liquids has asserted that it is feasible to make the color of zirconium oxide frameworks much more compatible with the natural tooth color. Liquids are water based and acid free, used with only the brush technique. There are many different effect shades for desired characterizations. It provides intense saturation of color that penetrates deep into the zirconium material.

Aim: To provide scientific evidence of the liners and coloring liquids effects on color and value changes in zirconium crowns

Material and methods: A research was carried out on Medline and PubMed using the following key words; ceramic crown, deep and brush technique, ceramic technology. Only papers published in English in the last ten years with a study hypothesis clearly stated in their abstracts were selected for full review. Materials for this research were also collected from trainings for dental technicians from Yeti-Gebdi Dental, Engen Germany.

Results and conclusions: The type of zirconium cores staining technique has an influence on all ceramic crowns value. Therefore, it is recommended to consider staining technique as one of the influential factors on the final color of zirconium crowns.

Hypertrophic gingivitis as a consequence of the presence of the cavities and incorrect restorations (clinical case)

ARJONA PARLLAKU*; **ERISA MUCA**; **HAMDIE LLESHI**; **DR. NINETA FINO**; **DR. ORGES SIMEON**
Faculty of Dental Sciences, Aldent University

Aim: Hypertrophic gingivitis caused by the presence of the cavities and incorrect restorations and its treatment in a clinical case.

Introduction: Hypertrophic gingivitis otherwise known as hyperplastic gingivitis refers to chronic inflammation of the gums stimulated by various etiological local factors present in the oral cavity. These factors may be dental bacterial plaque, dental calculus, incorrect dental restorations, dental cavities which result in collecting food debris, orthodontic treatment, etc . In this clinical case the major etiological factors are incorrect restorations and presence of the cavities which cause bacterial plaque accumulation and eventually hypertrophic gingivitis.

Material and methods: For this paper we used a clinical case. Female patient 20 years old with initials H.K. was presented in Aldent University with hypertrophic gingivitis localized in lower left mandibular region. Necessary clinical and radiological examination were done and was noticed that the gingiva was edematous, hyperemic and hypertrophic. Deep cleaning and gingival curettage was done, teeth were treated endodontically and then were reconstructed with correct restorations.

Conclusions: The treatment of hypertrophic gingivitis was done successfully. The gingival shape, color and function went back to normality.

Keywords: Hypertrophic gingivitis, inflammation, curettage, incorrect filling, dental bacterial plaque.

Ergonomic work posture in undergraduate laboratory technician students, correlation between theory and practice

**DONATELA BENDAJ; BJANKA COMA; EMILJANO VENGO; KRISTINA PERPALAJ;
MSC AJOLA NASTI**

Faculty of Dental Sciences, Aldent University

Introduction: The presence of theoretical knowledge on ergonomics, as well as its practical application, is very important to prevent musculoskeletal disorders.

Aim: Correlating between the theoretical knowledge of ergonomic posture and its practical application among laboratory technicians students, as well as between the students' theoretical knowledge and their practical self-assessment.

Materials and methods: 60 students of Aldent University were evaluated and selected randomly. Each student responded to a multiple-choice questionnaire on the requirements of ergonomic posture and received a score (0-10 points). To analyze the practical implementation of work posture and the self-assessment, photographs were taken of students performing laboratory procedures. To assess the practical application, each procedure was assessed by a calibrated researcher and received a score (0-10 points). For the self-assessment, each student analyzed the photographs of their own posture and received a score (0-10 points). The theoretical knowledge and the self-assessment practice were corrected by the researcher.

Results: A descriptive statistical analysis was performed. The correlation between theoretical knowledge and practical application and between theoretical knowledge and self-assessment were estimated using Pearson's correlation coefficient (r), and the significance was tested using Student's t -test. There was no correlation between theoretical knowledge and practical application or between theoretical knowledge and the practical self-assessment score.

Conclusions: The theoretical knowledge of students on ergonomics was greater than its practical application and their self-assessment, and there was no correlation between them.

Keywords: ergonomics, musculoskeletal disorders, occupational health, dental technician students.

An alternative treatment for enamel hyperesthesia with tiefenfluoride solutions

SONJA MUÇA; ELENA GAVOJ; LIVIA TAFI; DENADA BUCI; GLEDA DHIMA; ADELINA JAKUPI; ANTEA IRVA ZILEXHIU; ETELEVA DROBONIKU; AIDA METO

Department of Conservative Dentistry, University of Dental Medicine

Introduction: The process of remineralisation is important not only for the fight against caries, but also to avoid the phenomenon of hypersensitivity. Hypersensitivity is related to increased sensitivity of dental tissues by the action of mechanical, thermal and chemical factors. It may appear as a result of enamel wear, root exposure, caries, or microfractures. The main manifestation of hypersensitivity is the pain that comes in response to sweet, sour, cold, hot, salty, air flow or even chewing.

Purpose: To demonstrate clinical outcomes of the hypersensitivity treatment to non-cariogenic defects.

Material and methods: We treated 30 patients, 21 women and 9 men, aged from 19-45 years, diagnosed with enamel hyperesthesia. The main clinical signs were hyperesthesia from cold, sweet, hyperesthesia during chewing and from any other chemical or physical stimulus. The level of hyperesthesia was assessed by using digi-test meter for making evaluations in mkA. 15 patients were treated with 2 solutions of Tiefenfluoride during 2-3 sessions carried out in interval of 7 days. The other 15 patients (as control group) were treated with conventional fluoride gel during 7 sessions. The patients were followed up to 6 months.

Results: All cases treated with Tiefenfluoride resulted more successful compared to the treatment with conventional fluoride gel. Since the first session a sensitivity reduction was achieved, as digi-test meter showed.

Conclusions: After analyzing our cases, we came to conclusion that Tiefenfluoride achieved more sustainable and effective results comparing to conventional fluoride gel.

Keywords: digi-test meter, enamel hyperesthesia, fluoride gel, tiefenfluoride.

The variety of toothpastes in Albania and their correlation with their effectivity on teeth's hard and soft tissue at adult patients

ELSENA MATAJ; DITMIR KOPANI; INA GJEÇI; IVA VATA; MARSELA KALACI; MARINELA NDOJ; ILDA DOGJANI; JENA FERIZOLLI; AIDA METO

Department of Conservative Dentistry, Faculty of Dental Medicine, Tirana

Introduction: Toothpastes are daily products we use to take care of our oral hygiene. Their usage consists on reducing bacterial plaque, preventing caries, keeping soft tissues healthy, whitening of teeth, dental hypersensitivity. There are a variety of toothpastes produced by different companies, which are sold on supermarkets and pharmacies in Albania. Is there a real difference between various types of toothpastes? Does anyone of these have better effects on teeth health than the other ones?

Purpose: Giving opinions on choosing the right toothpaste due to patients oral status, based on different references.

Methods and materials: Studying the most used toothpastes in Albania. Let us classify them in two groups. The first one, pharmaceutical toothpastes were divided into three subgroups: a-curative toothpastes, b-herbal toothpastes, c-whitening toothpastes. The second group, toothpastes sold in supermarkets, consists in three other subgroups: a-general toothpastes, b-herbal toothpastes, c-whitening toothpastes. Their ingredients were analyzed based on the comparison between these toothpastes available for their efficiency. For each group, the results were converted into graphics and tables displays.

Results: By analyzing the ingredients of these toothpastes, we evaluated the effects of each ingredient. The effects of pharmaceutical toothpastes with prophylactic ingredients were observed, relying on foreign literature.

Conclusions: Pastes with positive effects for adults are those with fluoride and chlorhexidine contents. While, other toothpastes are those containing whitening and disinfectant elements for the dental structure.

Keywords: classification, ingredients, literature, toothpaste, tooth structure.

