

UDK 37

ISSN 2545 – 4439
ISSN 1857 - 923X

INTERNATIONAL JOURNAL

Institute of Knowledge Management

KNOWLEDGE



Scientific Papers
Vol. 20. 4.

MEDICAL SCIENCES
KNOWLEDGE IN PRACTICE



KIJ Vol. 20 No. 4 pp. 1617 - 2176 Skopje 2017

Global Impact & Quality Factor 1.322 (2016) <http://globalimpactfactor.com/knowledge-international-journal/>

KNOWLEDGE



KNOWLEDGE - INTERNATIONAL JOURNAL
SCIENTIFIC PAPERS
VOL 20.4

Promoted in Bansko, Republic of Bulgaria

15-17.12.2017

INSTITUTE OF KNOWLEDGE MANAGEMENT

SKOPJE, MACEDONIA



KNOWLEDGE

International Journal Scientific papers Vol. 20.4

EDITORIAL BOARD

Vlado Kambovski PhD, Robert Dimitrovski PhD, Siniša Zarić PhD, Maria Kavdanska PhD, Venelin Terziev PhD, Mirjana Borota – Popovska PhD, Cezar Birzea PhD, Ljubomir Kekenovski PhD, Aleksandar Nikolovski PhD, Ivo Zupanovic, PhD, Savo Ashtalkoski PhD, Svetlana Trajković PhD, Zivota Radosavljević PhD, Laste Spasovski PhD, Mersad Mujevic PhD, Milenko Dzeletovic PhD, Margarita Koleva PhD, Nonka Mateva PhD, Rositsa Chobanova PhD, Predrag Trajković PhD, Dzulijana Tomovska PhD, Nedzat Koraljić PhD, Nebojsa Pavlović PhD, Nikolina Ognenska PhD, Lisen Bashkurti PhD, Trajce Dojcinovski PhD, Jana Merdzanova PhD, Zoran Srzentić PhD, Nikolai Sashkov Cankov PhD, Marija Kostic PhD

Print: GRAFOPROM – Bitola

Editor: IKM – Skopje

For editor

Robert Dimitrovski, PhD

KNOWLEDGE

International Journal Scientific Papers Vol. 20.4

ISSN 1857-923X for e - version

ISSN 2545-4439 for printed version

SCIENTIFIC COMMITTEE

President: Academician Prof. Vlado Kambovski, PhD

Vice president: Prof. Robert Dimitrovski PhD, Institute of Knowledge Management - Skopje (Macedonia)

Members:

- Prof. Aleksandar Nikolovski PhD, FON University, Skopje (Macedonia)
- Prof. Aleksandar Korablev PhD, Dean, Faculty for economy and management, Saint Petersburg State Forest Technical University, Saint Petersburg (Russian Federation)
- Prof. Azra Adjajlic – Dedovic PhD, Faculty of criminology and security, Sarajevo (Bosnia & Herzegovina)
- Prof. Antoanela Hristova PhD, European Polytechnic University, Pernik (Bulgaria)
- Prof. Anita Trajkovska PhD, Rochester University (USA)
- Prof. Anka Trajkovska-Petkoska PhD, UKLO, Faculty of technology and technical sciences, Bitola (Macedonia)
- Prof. Alisabri Sabani PhD, Faculty of criminology and security, Sarajevo (Bosnia & Herzegovina)
- Prof. Ahmad Zakeri PhD, University of Wolver Hampton, (United Kingdom)
- Prof. Ana Dzumalieva PhD, South-West University “Neofit Rilski”, Blagoevgrad (Bulgaria)
- Prof. Branko Sotirov PhD, University of Rousse, Rousse (Bulgaria)
- Prof. Branko Boshkovic, PhD, College of Sports and Health, Belgrade (Serbia)
- Prof. Branimir Kampl PhD, Institute SANO, Zagreb (Croatia)
- Prof. Baki Koleci PhD, University Hadzi Zeka, Peja (Kosovo)
- Prof. Branislav Simonovic PhD, Faculty of Law, Kragujevac (Serbia)
- Prof. Bistra Angelovska, Faculty of Medicine, University “Goce Delcev”, Shtip (Macedonia)
- Prof. Cezar Birzea, PhD, National School for Political and Administrative Studies, Bucharest (Romania)
- Prof. Cvetko Andreevski, Faculty of Tourism, UKLO, Bitola (Macedonia)
- Prof. Drago Cvijanovic, PhD, Faculty of Hotel Management and Tourism, University of Kragujevac, Vrnjacka Banja (Serbia)
- Prof. Dusan Ristic, PhD Emeritus, College of professional studies in Management and Business Communication, Novi Sad (Serbia)
- Prof. Dimitar Radev, PhD, Rector, University of Telecommunications and Post, Sofia (Bulgaria)
- Prof. Daniela Todorova PhD, Rector of “Todor Kableshev” University of Transport, Sofia (Bulgaria)
- Prof. Dragan Kokovic PhD, University of Novi Sad, Novi Sad (Serbia)
- Prof. Dragan Marinkovic PhD, High health – sanitary school for professional studies, Belgrade (Serbia)
- Prof. Daniela Ivanova Popova PhD, Faculty of Public Health and Sport, SWU Neofit Rilski, Blagoevgrad (Bulgaria)
- Prof. Dzulijana Tomovska, PhD, Dean, Faculty of Biotechnical sciences, Bitola (Macedonia)
- Prof. Evgenia Penkova-Pantaleeva PhD, UNWE -Sofia (Bulgaria)
- Prof. Emilija Djikić Jovanović, PhD, High School of Arts and Technology, Leskovac (Serbia)
- Prof. Erzika Antic PhD, High medicine school for professional studies “Hipokrat”, Bujanovac (Serbia)

- Prof. Georgi Georgiev PhD, National Military University “Vasil Levski”, Veliko Trnovo (Bulgaria)
- Prof. Helmut Shramke PhD, former Head of the University of Vienna Reform Group (Austria)
- Prof. Hristina Georgieva Yancheva, PhD, Rector, Agricultural University, Plovdiv (Bulgaria)
- Prof. Hristo Beloev PhD, Bulgarian Academy of Science, Rector of the University of Rousse (Bulgaria)
- Prof. Izet Zeqiri, PhD, Academic, SEEU, Tetovo (Macedonia)
- Prof. Ivan Marchevski, PhD, Rector, D.A. Tsenov Academy of Economics, Svishtov (Bulgaria)
- Doc. Igor Stubelj, PhD, PhD, Faculty of Management, Primorska University, Koper (Slovenia)
- Prof. Ivan Petkov PhD, Rector, European Polytechnic University, Pernik (Bulgaria)
- Prof. Isa Spahiu PhD, AAB University, Prishtina (Kosovo)
- Prof. Ivana Jelik PhD, University of Podgorica, Faculty of Law, Podgorica (Montenegro)
- Prof. Islam Hasani PhD, Kingston University (Bahrein)
- Prof. Jova Ateljevic PhD, Faculty of Economy, University of Banja Luka, (Bosnia & Herzegovina)
- Prof. Jove Kekenovski PhD, Faculty of Tourism, UKLO , Bitola (Macedonia)
- Prof. Jonko Kunchev PhD, University „Cernorizec Hrabar“ - Varna (Bulgaria)
- Prof. Jelena Stojanovic PhD, High medicine school for professional studies “Hipokrat”, Bujanovac (Serbia)
- Prof Karl Schopf, PhD, Akademie fur wissenschaftliche forchung und studium, Wien (Austria)
- Prof. Katerina Belichovska, PhD, Faculty of Agricultural Sciences, UKIM, Skopje (Macedonia)
- Prof. Krasimir Petkov, PhD, National Sports Academy “Vassil Levski”, Sofia (Bulgaria)
- Prof. Kamal Al-Nakib PhD, College of Business Administration Department, Kingdom University (Bahrain)
- Prof. Lidija Tozi PhD, Faculty of Pharmacy, Ss. Cyril and Methodius University, Skopje (Macedonia)
- Prof. Laste Spasovski PhD, Vocational and educational centre, Skopje (Macedonia)
- Prof. Lujza Grueva, PhD, Faculty of Medical Sciences, UKIM, Skopje (Macedonia)
- Prof. Lisen Bashkurti PhD, Global Vice President of Sun Moon University (Albania)
- Prof. Lence Mircevska PhD, High Medicine School, Bitola, (Macedonia)
- Prof. Ljubomir Kekenovski PhD, Faculty of Economisc, UKIM, Skope (Macedonia)
- Prof. Ljupce Kocovski PhD, Faculty of Biotechnical sciences, Bitola (Macedonia)
- Prof. Marusya Lyubcheva PhD, University “Prof. Asen Zlatarov”, Member of the European Parliament, Burgas (Bulgaria)
- Prof. Maria Kavdanska PhD, Faculty of Pedagogy, South-West University Neofit Rilski, Blagoevgrad (Bulgaria)
- Prof. Maja Lubenova Cholakova PhD, Faculty of Public Health and Sport, SWU Neofit Rilski, Blagoevgrad (Bulgaria)
- Prof. Mirjana Borota-Popovska, PhD, Centre for Management and Human Resource Development, Institute for Sociological, Political and Juridical Research, Skopje (Macedonia)
- Prof. Mihail Garevski, PhD, Institute of Earthquake Engineering and Engineering Seismology, Skopje (Macedonia)
- Prof. Misho Hristovski PhD, Faculty of Veterinary Medicine, Ss. Cyril and Methodius University, Skopje (Macedonia)

- Prof. Mitko Kotovchevski, PhD, Faculty of Philosophy, UKIM, Skopje (Macedonia)
- Prof. Milan Radosavljevic PhD, Dean, Faculty of strategic and operational management, Union University, Belgrade (Serbia)
- Prof. Marija Topuzovska-Latkovikj, PhD, Centre for Management and Human Resource Development, Institute for Sociological, Political and Juridical Research, Skopje (Macedonia)
- Prof. Marija Knezevic PhD, Academic, Banja Luka, (Bosnia and Herzegovina)
- Prof. Margarita Koleva, PhD, Faculty of Pedagogy, University Neofit Rilski, Blagoevgrad (Bulgaria)
- Prof. Margarita Bogdanova PhD, D.A.Tsenov Academy of Economics, Svishtov (Bulgaria)
- Prof. Mahmut Chelik PhD, Faculty of Philology, University “Goce Delchev”, Shtip (Macedonia)
- Prof. Marija Mandaric PhD, Faculty of Hotel Management and Tourism, University of Kragujevac, Vrnjacka Banja (Serbia)
- Prof. Mustafa Kacar PhD, Euro College, Istanbul (Turkey)
- Prof. Marina Simin PhD, College of professional studies in Management and Business Communication, Sremski Karlovci (Serbia)
- Prof. Miladin Kalinic, College of professional studies in Management and Business Communication, Sremski Karlovci (Serbia)
- Prof. Mitre Stojanovski PhD, Faculty of Biotechnical sciences, Bitola (Macedonia)
- Prof. Miodrag Smelcerovic PhD, High Technological and Artistic Vocational School, Leskovac (Serbia)
- Prof. Nenad Taneski PhD, Military Academy “Mihailo Apostolski”, Skopje (Macedonia)
- Prof. Nevenka Tatkovic PhD, Juraj Dobrila University of Pula, Pula (Croatia)
- Prof. Natalija Kirejenko PhD, Faculty For economic and Business, Institute of Entrepreneurial Activity, Minsk (Belarus)
- Prof. Nikolay Georgiev PhD, “Todor Kableshkov” University of Transport, Sofia (Bulgaria)
- Prof. Nikolina Ognenska PhD, Faculty of Music, SEU - Blagoevgrad (Bulgaria)
- Prof. Nedzat Korajlic PhD, Faculty of criminology and security, Sarajevo (Bosnia & Herzegovina)
- Prof. Nishad M. Navaz PhD, Kingdom University (India)
- Prof. Oliver Iliev PhD, Faculty of Communication and IT, FON University, Skopje (Macedonia)
- Prof. Oliver Dimitrijevic PhD, High medicine school for professional studies “Hipokrat”, Bujanovac (Serbia)
- Prof. Paul Sergius Koku, PhD, Florida State University, Florida (USA)
- Prof. Primoz Dolenc, PhD, Faculty of Management, Primorska University, Koper (Slovenia)
- Prof. Predrag Trajkovic PhD, JMPNT, Vranje (Serbia)
- Prof. Petar Kolev PhD, “Todor Kableshkov” University of Transport, Sofia (Bulgaria)
- Prof. Pere Tumbas PhD, Faculty of Economics, University of Novi Sad, Subotica (Serbia)
- Prof. Rade Ratkovic PhD, Faculty of Business and Tourism, Budva (Montenegro)
- Prof. Rositsa Chobanova PhD, University of Telecommunications and Posts, Sofia (Bulgaria)
- Prof. Rumen Valcovski PhD, Imunolab Sofia (Bulgaria)
- Prof. Rumen Stefanov PhD, Dean, Faculty of public health, Medical University of Plovdiv (Bulgaria)
- Prof. Sinisa Zaric, PhD, Faculty of Economics, University of Belgrade, Belgrade (Serbia)
- Prof. Sasho Korunoski, Rector, UKLO, Bitola (Macedonia)
- Prof. Sashko Plachkov PhD, Faculty of Pedagogy, University Neofit Rilski, Blagoevgrad (Bulgaria)

- Prof. Sofronija Miladinoski, PhD, University Hadzi Zeka, Peja (Kosovo)
- Prof. Sreten Miladinoski, PhD, Dean, Faculty of Law, MIT University (Skopje)
- Prof. Snezhana Lazarevic, PhD, College of Sports and Health, Belgrade (Serbia)
- Prof. Stojan Ivanov Ivanov PhD, Faculty of Public Health and Sport, SWU Neofit Rilski, Blagoevgrad (Bulgaria)
- Prof. Svetlana Trajkovic PhD, High School of applied professional studies, Vranje (Serbia)
- Prof. Snezana Stoilova, PhD, High Medicine School, Bitola, (Macedonia)
- Prof. Stojna Ristevska PhD, High Medicine School, Bitola, (Macedonia)
- Prof. Suzana Pavlovic PhD, High health – sanitary school for professional studies, Belgrade (Serbia)
- Prof. Saad Motahhir PhD, High School of Technology, Fez (Morocco)
- Prof. Sandra Zivanovic, PhD, Faculty of Hotel Management and Tourism, University of Kragujevac, Vrnjacka Banja (Serbia)
- Prof. Trayan Popkochev PhD, Dean, Faculty of Pedagogy, South-West University Neofit Rilski, Blagoevgrad (Bulgaria)
- Prof. Todor Krystevich, Vice Rector, D.A. Tsenov Academy of Economics, Svishtov (Bulgaria)
- Doc. Tatyana Sobolieva PhD, State Higher Education Establishment Vadiym Getman Kiyev National Economic University, Kiyev (Ukraine)
- Prof. Tzako Pantaleev PhD, NBUniversity, Sofia (Bulgaria)
- Prof. Tosko Krstev PhD, European Polytechnic University, Pernik (Bulgaria)
- Prof. Tihomir Domazet PhD, President of the Croatian Institute for Finance and Accounting, Zagreb (Croatia)
- Prof. Venelin Terziev PhD, University of Rousse, Rousse (Bulgaria)
- Prof. Violeta Dimova PhD, Faculty of Philology, University “Goce Delchev”, Shtip (Macedonia)
- Prof. Volodymyr Denysyuk, PhD, Dobrov Center for Scientific and Technological Potential and History studies at the National Academy of Sciences of Ukraine (Ukraine)
- Prof. Valentina Staneva PhD, “Todor Kableshkov” University of Transport, Sofia (Bulgaria)
- Prof. Vladimir Tomošević, PhD dekan, Fakultet za inženjerski menadžment, Univezitet Union "Nikola Tesla", Beograd, (Srbija)
- Prof. Vladimir Lazarov PhD, European Polytechnic University, Pernik (Bulgaria)
- Prof. Vasil Zecev PhD, College of tourism, Blagoevgrad (Bulgaria)
- Prof. Venus Del Rosario PhD, Arab Open University (Philippines)
- Prof. Yuri Doroshenko PhD, Dean, Faculty of Economics and Management, Belgorod (Russian Federation)
- Prof. Zlatko Pejkov, PhD, Faculty of Agricultural Sciences, UKIM, Skopje (Macedonia)
- Prof. Zivota Radosavljevik PhD, Dean, Faculty FORCUP, Union University, Belgrade (Serbia)
- Prof. Zoja Katru PhD, Prorector, Euro College, Istanbul (Turkey)
- Prof. Zorka Jugovic PhD, High health – sanitary school for professional studies, Belgrade (Serbia)

ORGANIZING COMMITTEE

- Robert Dimitrovski PhD, Faculty of Management, MIT University, Skopje (Macedonia)
- Venelin Terziev PhD, University of Rousse (Bulgaria)
- Maria Kavdanska PhD, Faculty of Pedagogy, South West University Neofit Rilski, Blagoevgrad (Bulgaria)
- Sinisa Zanic, PhD, Faculty of Economics, University of Belgrade (Serbia)
- Snežana Milićević PhD, Faculty of Hotel Management and Tourism, University of Kragujevac, Vrnjačka Banja (Serbia)
- Evdokia Petkova, South West University “Neofit Rilski”, Blagoevgrad (Bulgaria)
- Marios Miltiadou, PhD, Aristotle University of Thessaloniki (Greece)
- Azra Adjajlic – Dedovic PhD, Faculty of criminology and security, Sarajevo (Bosnia & Herzegovina)
- Misho Hristovski PhD, Faculty of Veterinary Medicine, Ss. Cyril and Methodius University, Skopje (Macedonia)
- Branko Boskovic PhD, College of Sports and Health, Belgrade (Bulgaria)
- Ana Dzumalieva PhD, South-West University “Neofit Rilski”, Blagoevgrad (Bulgaria)
- Georgi Georgiev PhD, National Military University “Vasil Levski”, Veliko Trnovo (Bulgaria)
- Isa Spahiu PhD, International Balkan University (Macedonia)
- Hatidza Berisha, Military Academy, University of Defense, Belgrade (Serbia)
- Violeta Dimova, PhD, University “Goce Delcev”, Stip (Macedonia)
- Mirjana Borota – Popovska, Centre for Management and Human Resource Development, Institute for Sociological, Political and Juridical Research, Skopje (Macedonia)
- Izet Zeqiri, PhD, South East European University, Tetovo (Skopje)
- Ekaterina Arabska, PhD, Vasil Levski National Military University, Veliko Tarnovo (Bulgaria)
- Nebojsa Cvetanovski, PhD, MIT University, Skopje (Macedonia)
- Rumens Valcovski PhD, Imunolab Sofia (Bulgaria)
- Miladin Kalinic, College of professional studies in Management and Business Communication, Sremski Karlovci (Serbia)

Contents

A COMPARATIVE STUDY OF HEALTH EDUCATION SYLLABI FOR FUTURE KINDERGARTEN TEACHERS' TRAINING	1639
Svetlana Angelova	1639
C-REACTIVE PROTEIN -BIOMARKER OF COMORBIDITIES IN PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE	1647
Liljana Simonovska	1647
Iva Paneva.....	1647
A CONCEPTUAL MODEL OF WEB-BASED EDUCATION QUALITY ASSESSMENT SYSTEM IN MEDICAL HIGHER SCHOOLS	1653
Kristina Kilova.....	1653
Tanya Kitova.....	1653
Antonia Yaneva	1653
Teodora Dimcheva.....	1653
Zhivko Peychev	1653
Desislava Bakova.....	1653
Nonka Mateva.....	1653
ACUTE CORONARY SYNDROME – EARLY SURGICAL RESULTS	1661
Zaprin Vazhev.....	1661
Hristo Stoev	1661
Asen Ivanov	1661
Todor Gonovski	1661
Yordanka Tsokova.....	1661
AN APPROACH TO A CHILD WITH RESPIRATORY TRACT INFECTION	1667
Arlind Alili.....	1667
Alba Alili	1667
Adelina Alili.....	1667
Tauland Muharemi.....	1667
ANALYSIS OF THE IMPLEMENTATION OF THE „STUDENT PRACTICE“ PROJECT IN THE MEDICAL UNIVERSITY - PLOVDIV FOR THE PERIOD 2013-2015 Y.....	1671
Zhivko Peychev	1671
Mihaela Shishmanova-Doseva.....	1671
Stela Peycheva	1671
Teodora Dimcheva.....	1671
Antonia Yaneva	1671
Kristina Kilova.....	1671
Angelina Kirkova.....	1671
ANATOMICAL VARIATIONS OF FORAMEN OVALE	1677
Svetlana Jovevska	1677
Lence Nikolovska	1677
ANTITUMOR ACTIVITY EVALUATION OF 4-THIAZOLIDINE DERIVATIVES.....	1681
Stefan Harkov	1681
Vanya Pepelyasheva	1681
APPLICATION IN THE CLINICAL PRACTICE OF A MODIFIED MODEL FOR EARLY POSTOPERATIVE RECOVERY	1689
Stefka Georgieva.....	1689

Mariya Dimitrova.....	1689
Tanya Popova.....	1689
Dimitrinka Blagoeva.....	1689
APPLICATION OF SPECIALIZED KINESITHERAPEUTIC METHODS IN CHILDREN WITH CEREBRAL PALSY.....	1695
Margarita Valerieva Avramova.....	1695
BACTERIAL RESISTANCE IN HOSPITALIZED PATIENTS.....	1701
Marija Darkovska-Serafimovska.....	1701
Tijana Serafimovska.....	1701
Vaso Taleski.....	1701
BIOCHEMICAL MARKERS OF BONE METABOLISM, OSTEOPOROSIS PREVENTION AND PROPHYLACTICS.....	1709
Pavlina Teneva.....	1709
Mariana Staneva.....	1709
Ivelina Dobрева.....	1709
Rumyana Sherletova.....	1709
BLOOD TYPES AND SUICIDE RATES IN THE REGION OF PLOVDIV, REPUBLIC OF BULGARIA.....	1713
Marin Kostadinov Baltov.....	1713
Ekaterina Lyubenova Raykova.....	1713
Vanina Krasteva Mihaylova.....	1713
Iliya Petrov Bivolarski.....	1713
BRUXISM – TEETH GRINDING.....	1719
Katerina Zlatanovska.....	1719
Ivona Kovacevska.....	1719
Natasa Longurova.....	1719
Sandra Atanasova.....	1719
Mihajlo Petrovski.....	1719
CHALLENGES AND CHANGES IN RELATIONS BETWEEN FITNESS TRAINER AND FITNESS AMATEUR IN THE TECHNOLOGY CENTURY.....	1725
Ivan Nedelchev.....	1725
COMPARISON OF HEMODINAMIC PROFILE AND ARTERIAL STIFFNESS IN STUDENTS OF MEDICINE, TRAINING FOOTBALL AND PHYSICALLY INACTIVE OBJECTS.....	1729
M.Bacelova.....	1729
J.Nikolova.....	1729
K. Kanalev.....	1729
P. Nikolov.....	1729
K. Kableskov.....	1729
P. Krastev.....	1729
CURRENT DIRECTIONS IN PROVIDING HEALTHY AND SAFE WORKING CONDITIONS IN MEDICAL UNIVERSITY - PLOVDIV.....	1735
Mariya Pavlova.....	1735
DENTAL CHARACTERISTICS IN BULIMIC PATIENTS.....	1741
Natasha Longurova.....	1741
Ivona Kovachevska.....	1741
Nikola Denkov.....	1741

Katerina Zlatanovska	1741
Verica Toneva.....	1741
DOCTORS AND CLERICS IN IMPLEMENTING THE PATIENT CARE IN CLINICAL SETTINGS	
.....	1745
P. Asparuhova.....	1745
E. Jeleva.....	1745
N. Yordanov.....	1745
ENHANCING PERSONAL AND PUBLIC WELL BEING THROUGH EVIDENCE BASED	
ARTTHERAPY	1751
T. Shekerdzhieva-Nowak.....	1751
L. Despotova-Toleva.....	1751
EPIDEMIOLOGICAL CHARACTERISTICS OF PEOPLE WITH CARDIOVASCULAR DISEASES IN	
THE REGION OF SHTIP	1759
Milka Zdravkovska	1759
Bisera Stojmenova – Runteva.....	1759
Marija Darkovska-Serafimovska	1759
ESSENTIAL TRACE ELEMENTS - CLINICAL SIGNIFICANCE AND LABORATORY METHODS	
.....	1765
Delyana Davcheva	1765
ESTABLISHMENT AND INTRODUCTION OF THE WEB-BASED INFORMATION SYSTEM FOR	
PREVENTION AND DIAGNOSIS OF bURNOUT SYNDROME	1771
Stanislava Harizanova.....	1771
Rumyana Stoyanova	1771
EVALUATION AND MANAGEMENT OF A CHILD WITH FEBRILE SEIZURE	1775
Leartha Alili Ademi.....	1775
Blerim Ademi.....	1775
EXPLORATION OF THE IMPACT OF NOISE ON STUDENTS WITH IMPROVED	
DIFFICULTIES AND THE EFFECT OF A KINESITHEPAPETICAL PROGRAM FOR	
OVERCOMING OF THEIR SIDE EFFECTS	1779
Mariana Albert.....	1779
FECULENT PERITONITIS	1783
Boyko Atanasov.....	1783
Nikolay Belev	1783
GESTATION DIABETES AND IMPORTANCE OF DIAGNOSE DURING THE PREGNANCY,	
EXPERIENCE OF CLINIC FOR GYNECOLOGY AND OBSTETRICS IN SKOPJE IN THE PERIOD	
FROM 2013 TO 2015	1787
Biljana Gjorgjeska	1787
Vesna Mladenovska.....	1787
GLOBAL CAMPAIGN FOR SAFE INJECTION PRACTICES – K1-AD – THE SMART SYRINGES	
.....	1793
Yovka Zlatanova.....	1793
Nedyalka Boycheva	1793
Tsvetomila Valcheva	1793
IMPACT OF LEARNING CURVE ON LAPAROSCOPIC APPENDECTOMIES	1799
Boyko Atanasov.....	1799
Nikolay Belev	1799

INNOVATIVE APPROACHES IN THE PREPARATION OF MANAGEMENT DISCIPLINES OF MANAGERIAL STAFF IN PUBLIC HEALTH	1803
Vanina Mihaylova.....	1803
Mariana Lyochkova	1803
Maria Semerdzhieva	1803
Adolf Alakidi	1803
Dimitar Shopov.....	1803
INTERRELATION BETWEEN OXIDATIVE STRESS AND DISEASES RELATED TO INSULIN RESISTANCE	1811
Desislava Arabadzhyska	1811
Dora Terzieva.....	1811
KINESITHERAPY FOR CHILDREN WITH GENERALIZED JOINT HYPERMOBILITY (GJH) ..	1817
Snezhina Georgieva	1817
MANAGEMENT IN HEALTHCARE	1823
Oliver Dimitijević	1823
MANAGEMENT AND LEADERSHIP IN A HEALTH ORGANIZATION FOR OUTPATIENT CARE	1827
Radka Goranova- Spasova.....	1827
Mila Moskova	1827
Nadejda Kostova- Kamburova.....	1827
MANAGEMENT OF CHRONIC DISEASES - DEFINITION AND PRINCIPLES	1833
Boryana Levterova.....	1833
MANAGEMENT OF HEALTHCARE IN CRHRONICAL VASCULAR DISEASES.....	1839
Mihaela Mireva.....	1839
Milan Tsekov	1839
Mariana Albert.....	1839
Aleksandra Zdravkova-Maleva.....	1839
MANAGER QUALIFICATION AS CONDITION FOR QUALITY OF THE HEALTHCARE	1843
Kamelia Bogdanova.....	1843
Evgeni Ivanov	1843
Zhulieta Gerenova.....	1843
MARKETING IN HEALTH SERVICES IN KOSOVO.....	1849
Nadire Loku	1849
MEDICAL AND SOCIAL CHARACTERISTICS OF PATIENTS WITH PRIMARY ENDOPROSTHESIS OF SHOULDER JOINT	1855
Kevork Kaykchian	1855
METABOLIC SYNDROME IN PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE: FREQUENCY AND RELATIONSHIP WITH CLINICAL CHARACTERISTICS.....	1861
Adem Musliu	1861
Bekim Mustafa.....	1861
Arber Musliu.....	1861
MIDDLE HIGHT MOUNTAIN TREATMENT BY PATIENTS WITH BRONHIAL ASTHMA.....	1869
Rumyana Bahchevandzhieva	1869
MOTIVATION FOR SELF-MONITORING, SOCOCONTROL AND AUTOLOGY IN PATIENTS WITH SUGAR DIABETES	1873
Varvara Pancheva	1873

NECESSITY OF COMMUNICATION SKILLS TRAINING OF MEDICAL NURSES AS A POST GRADUATE EDUCATION	1879
Julieta Gerenova.....	1879
Todor Dimitrov	1879
Evgeni Dimitrov.....	1879
NITRATES AS A RISK FACTOR FOR METHAEMOGLOBINAEMIA.....	1883
Ivelina Dobрева.....	1883
Pavlina Teneva.....	1883
Petya Krumova.....	1883
NUTRITIONAL NEEDS OF FORCES FOR EXPEDITIONARY OPERATIONS	1887
AT A NATIONAL TRAINING	1887
Pavlin Glushkov	1887
Stefan Filipov	1887
Nikolay Stefanov	1887
OBSERVATIONS ON AN APPROBATION OF A COURSE BOOK OF BULGARIAN LANGUAGE FOR STUDENTS IN MEDICINE, DENTAL MEDICINE AND PHARMACY AT PLOVDIV MEDICAL UNIVERSITY	1895
Lidiya Kavrakova.....	1895
Milena Dineva-Muleshkova.....	1895
OCCUPATIONAL THERAPY WITH CHILDREN AND YOUTH PEOPLE WITH MENTAL DISORDERS – PROBLEM AREAS	1901
Nikola Sabev	1901
Kiril Panayotov	1901
Yoana Negrova	1901
ORAL HEALTH CARE AT STUDENTS FROM DIFFERENT FACULTIES	1907
Ivona Kovachevska	1907
Natasha Longurova	1907
Katerina Zlatanovska	1907
Mihajlo Petrovski.....	1907
Zlatko Georgiev	1907
ORAL HYGIENE CARE FOR PATIENTS WITH GASTROINTESTINAL DISEASE.....	1913
Ivona Kovacevska.....	1913
Verica Toneva.....	1913
Aleksandra Toneva	1913
Sandra Atanasova.....	1913
Darko Kochovski	1913
ORTHOGONAL FREQUENCY DIVISION MULTIPLEXING (OFDM) METHODS FOR THE MULTIPLEXING IN WORLDWIDE INTEROPERABILITY FOR MICROWAVE ACCESS (WIMAX)	1919
Amet Shabani.....	1919
Besnik Qehaja	1919
OVERCOMING OCCUPATIONAL STRESS IN THE PERSPECTIVE OF NURSES IN MANAGEMENT POSITION.....	1925
Zlatina Lecheva.....	1925
Lora Georgieva	1925

PATIENT AWARENESS FOR THE UPCOMING PROCEDURES AND EMPATHY TOWARDS THEM	1931
Julieta Gerenova.....	1931
PATIENT EDUCATION IN THE FOOT CARE WITH ONYCHOCRYPTOSIS -	1935
AN IMPORTANT CONDITION FOR CARE AND PREVENTION	1935
Binnaz Asanova	1935
Katya Savova	1935
PHARMACOTHERAPEUTIC CONSIDERATIONS FOR USE OF ANNABINOIDS TO RELIEVE SYMPTOMS OF NAUSEA AND VOMITING INDUCED BY CYTOTOXIC THERAPY	1939
Marija Darkovska-Serafimovska	1939
Tijana Serafimovska	1939
Vaso Taleski.....	1939
Milka Zdravkovska	1939
Biljana Gjorgeska.....	1939
Trajan Balkanov.....	1939
PREVENTION AND DENTAL TREATMENT OF PATIENTS WITH EPILEPSY	1945
Sanja Nashkova.....	1945
Sandra Atanasova.....	1945
Verica Toneva.....	1945
PSYCHOLOGICAL ACCENTS IN ONCOLOGICAL PRACTICE.....	1951
Silvia Tcvetkova	1951
Daniela Petrova.....	1951
PSYCHOLOGICAL DIMENSIONS OF COPING WITH THE FEAR OF DEATH AMONG MEDICAL SPECIALISTS	1957
Nikola Georgiev.....	1957
Polina Balkanska.....	1957
PSYCHOSOCIAL SITUATION OF DEVELOPMENT OF STUDENTS WITH SENSORY AND MOTOR DISABILITIES IN THE GENERAL AND SPECIAL EDUCATION	1963
Tzvetomira Angelova.....	1963
QUALITY OF LIFE ASSESSMENT FROM PATIENTS WITH MULTIPLE SCLEROSIS.....	1971
Todor Dimitrov	1971
REFRACTORY ANOMALIES ON PRESCHOOL CHILDREN IN STIP	1977
Gazepov Strahil.....	1977
Panova Gordana	1977
Dimitrova Kristina	1977
Dodevska Biljana.....	1977
REHABILITATION OF FRACTURES IN CHILDREN'S AGE	1987
Lence Nikolovska	1987
Robert Milenkovski	1987
Tose Krstev	1987
Svetlana Jovevska	1987
RELATIONSHIP BETWEEN AEROBIC EFFICIENCY OF THE ATHLETES AND BLOOD LIPID PEROXIDATION.....	1991
Albena Alexandrova	1991
RELATIONSHIP BETWEEN ANTIOXIDANT ENZYMES AND INSULIN RESISTANCE IN PATIENTS WITH CHRONIC LIVER DISEASE	1997

Dimitar Terziev	1997
ROLE OF THE THEATRE IN THE EDUCATION OF STUDENTS IN THE SPECIALTY "MEDICAL AESTHETICIAN"	2003
Binnaz Assanova.....	2003
SELF-CONTROL OF PATIENTS WITH DIABETES UNDER INSULIN THERAPY	2007
A. Trajkovska – Dimitrova	2007
T. Dimitrov	2007
G. Tchaneva	2007
SEROUS MICROCYSTIC CYSTADENOMA (SMCA) OF THE PANCREAS.....	2011
N. Belev	2011
B. Atanasov.....	2011
E. Moshecov	2011
SOCIO-EMOTIONAL SKILLS OF UNIVERSITY STUDENTS – SPORTS PEDAGOGUES	2015
Nevyana Dokova.....	2015
Stefan Kinov	2015
SOURCES OF DIFFICULTIES OF PARENTS OF CHILDREN WITH MENTAL DISORDERS	2021
Ivana Rašković.....	2021
Aleksandra Đurić-Zdravković.....	2021
Mirjana Japundža-Milisavljević.....	2021
STANDARD TREATMENT OF PATIENTS WITH BURNS IN EMERGENCY HOSPITAL CENTERS	2027
Anushka Dimitrova.....	2027
Mariya Dimitrova.....	2027
Petya Kantareva	2027
Miloslava Ilieva	2027
SURGICAL TRAUMA CAUSE FOR MARGINAL BONE RESORPTION AROUND DENTAL IMPLANTS PREVIOUS TO PROSTHETIC APPLIANCES	2035
Kiro Papakoca.....	2035
Sonja Rogoleva	2035
Ljupka Lazarova	2035
Olivera Terzieva-Petrovska.....	2035
Mihajlo Petrovski.....	2035
THE METHODOLOGY OF HEALTH CARE EDUCATION AND TRAINING FOR THE PREPARATION OF THE MEDICAL SPECIALISTS.....	2041
E. Jeleva	2041
P. Asparuhova	2041
N. Yordanov.....	2041
THE PRESENCE OF IRREGULAR ANTIBODIES OF THE LEWIS SYSTEM IN BLOOD OF PREGNANT WOMEN.....	2045
Dragan Radonjić	2045
Duško Kljakić	2045
Snežana Filipović.....	2045
Stefan Grujičić	2045
Milenka Vraneš-Grujičić	2045
THE PREVALENCE OF POSTURAL DISORDERS AND SPINAL DEFORMITIES AMONG THE PUPILS IN THE MUNICIPALITY OF BEROVO	2051

Lence Nikolovska	2051
Timko Neshovski	2051
Tose Krstev	2051
Tamara Stratorska	2051
THE PROCESS OF FORMATION OF HEALTH COMPETENCIES OF GERIATRIC PROFESSIONALS - CHALLENGES,REGULATIONS, PERSPECTIVES	2057
Hristina Milcheva.....	2057
Petya Krumova.....	2057
Rumyana Sherletova	2057
TRAINING AND PROFESSIONAL COMPETENCIES OF THE NURSE	2063
Stefka Georgieva.....	2063
Petya Kantareva	2063
Antoaneta Terzieva	2063
Anushka Dimitrova.....	2063
TRAINING FOR PLANNING AND SOLUTIONS FOR CLIENTS	2069
WITH ALCOHOL DEPENDENCE.....	2069
Vanya Dineva.....	2069
VAC THERAPY IN THE TREATMENT AND PROPHYLAXIS OF WOUND INFECTION	2075
Nikolay Belev	2075
VALIDATION OF THE BULGARIAN TRANSLATION OF THE PATIENT ASSESSMENT OF CHRONIC ILLNESS CARE (PACIC 5As) SURVEY	2079
Teodora Dimcheva.....	2079
Nonka Mateva.....	2079
Antonia Yaneva	2079
Zhivko Peychev	2079
Kristina Kilova.....	2079
НЕПРАВИЛНИ МАНУАЛНИ УМЕНИЯ ЗА ПИСАНЕ ПРИ ДЕЦА СЪС СПЕЦИФИЧНО ЕЗИКОВО НАРУШЕНИЕ.....	2085
Лилия Янчева -Велинова.....	2085
Мартин Маринов.....	2085
НОМОФНОБИЯ OR MOBILE PHONE ADDICTION	2091
Ljiljana Desević	2091
Stefan Grujičić	2091
Milenka Vraneš-Grujičić	2091
STANDARD COMPUTERIZED PERIMETRY IN FUNCTION OF DIAGNOSTIC GLAUCOMA..	2095
Strahil Gazepov.....	2095
Iljaz Ismaili	2095
Elena Lichkova	2095
Gordana Panova.....	2095
Verica Stoimenova.....	2095
Emilija Goshevska Dashevaska.....	2095
THALASSOTHERAPEUTIC FACTORS IN TREATMENT AND REHABILITATION OF CHILDREN WITH CHRONIC RESPIRATORY DISEASES	2101
Snezhina Georgieva	2101
THE PROBLEM OF IRRATIONAL USE AND DISABILITY OF FRESH FROZEN PLASMA IN OUR PRACTICE	2105

Dragan Radonjić	2105
Mirjana Varjačić	2105
Gordana Šošilj.....	2105
Snežana Filipović.....	2105
Stefan Grujičić	2105
XEN IMPLANT AND FAKOEMULSYPHICATION	2109
Strahil Gazepov.....	2109
Topov A.	2109
Gordana Panova	2109
Gjorgji Shumanov.....	2109
REFERENCES.....	2112
DISCOURSE ANALYSIS IN THE TEXT OF RESTORATIVE DENTISTRY	2113
Djukica Mirkovic	2113
Tijana Vasiljevic – Stokic.....	2113
Miodrag Smelcerovic.....	2113
THE ROLE OF THE NURSE IN OBSTETRICS	2119
Panova Gordana	2119
Shumanov Gj.	2119
Gazepov S.	2119
Dzidrova V.....	2119
Dimova T.	2119
Petrova M.....	2119
УЛОГАТА НА ПАТРОНАЖНАТА СЕСТРА ПРИ ЕДУКАЦИЈА И ТРЕТМАН НА ПАЦИЕНТИ СО ДИЈАБЕТЕС.....	2127
Ивана Тренчева	2127
Гордана Панова.....	2127
SCREENING OF GLAUCOMA ON 2015 YEAR	2135
Iljaz Ismaili	2135
Emilija Gjosheska-Dashtevska	2135
Nadi Rustemi	2135
Hristijan Duma.....	2135
Strahil Gazepov.....	2135
Gazmend Mehmedi	2135
A PRESENTATION OF CHILDREN WITH CONGENITAL ANOMALIES IN THE MUNICIPALITY OF STIP	2143
Panova Gordana	2143
Shumanov Gjorgji.....	2143
Nikolovska Lenche	2143
Dzidrova Violeta.....	2143
DISEASES IN SCHOOL CHILDREN RESULTING FROM IMPROPER DIET	2153
Panova Gordana	2153
Shumanov Gjorgji.....	2153
EPIDEMIOLOGICAL CHARACTERISTICS OF SCHIZOPHRENIA IN PELAGONIA REGION IN THE PERIOD 2012-2016	2159
Gjorgji Šumanov.....	2159
Darko Gjorgiovski	2159

Gordana Panova	2159
Lazar Šumanovski.....	2159
IMMUNOPROPHILAXY OF THE TETANUS IN THE SKOPJE REGION FOR THE PERIOD 2011 - 2016	2165
Nina Knaggs.....	2165
Gjorgji Shumanov	2165
Gordana Panova	2165
Lazar Shumanovski.....	2165
Evgenija Markovska	2165
ФУНКЦИОНИРАНЕ ПСИХИЧНАТА ЗАЩИТНА ДОМИНАНТА НА ОБВИНЯЕМИЯ ПРИ ПРОВЕЖДАНЕТО НА РАЗПИТ В РАМКИТЕ НА НАКАЗАТЕЛНИЯ ПРОЦЕС	2173
Христо Иванов Попниколов	2173

XEN IMPLANT AND FAKOEMULSYPHICATION

Strahil Gazepov

Clinic hospital, Stip, Macedonia

Топов А.

Acibadem city clinic hospital, Tokuda

Gordana Panova

Faculty of medical sciences, University Goce Delchev, Stip, Macedonia gordana.panova@ugd.edu.mk

Gjorgji Shumanov

Faculty of medical sciences, University Goce Delchev, Stip, Macedonia

Abstract: The goal of our research is to describe the positive results of combined phaco surgery in patients with long-term glaucoma and the placement of xen implant, leading to the discontinuation of medical therapy.

Materials and methods: Eight patients undergoing long-term glaucoma and cataract medical therapy have been included from march 2017 until september 2017.

Results: Post-operative decrease of iop and better vision was found in all eyes part of the research.

Conclusion: The use of the implant leads to a safe and effective decrease of iop in patients with primary open-angle glaucoma, not controlled with medical therapy. The gel-implant is an alternative treatment method for patients with glaucoma, as well as a stand-alone option for patients with either cataract, or glaucoma.

Keywords: IOP, XEN

XEN ИМПЛАНТ И ФАКОЕМУЛСИФИКАЦИЯ

Страхил Газепов,

Клиничка болница . Щип,

А. Топов,

Аджибадем Сити Клиник болница Токуда,

Гордана Панова,

Факултет за медицински науки „Гоце Делчев“ Штип, Македонија gordana.panova@ugd.edu.mk

Ѓорѓи Шуманов

Факултет за медицински науки „Гоце Делчев“ Штип, Македонија

Резюме: Пациенти с катаракта и глаукома, са подложени на комбинирана хирургия с хеп имплант, поради отсъствие на контрол на iop с медикаментозна терапия.

ЦЕЛ: Целта на нашето проучване е да се представят резултати при комбинирана факохирургия при пациенти с дългогодишна глаукома, и поставяне на хеп имплант, с цел премахване на медикаментозна терапия.

МАТЕРИАЛ И МЕТОДИ: За периода март 2017-септември 2017, са направени 8 пациента, с дългогодишна медикаментозна терапия за глаукома и катаракта.

Резултати: при всички очи се получи намаляване на iop, и подобряване на зрението в ранния постоперативен период.

ЗАКЛЮЧЕНИЕ: Имплантът води до безопасно и ефективно понижаване на iop при пациенти с първична откритоъгълна глаукома, неконтролирани с медикаментозна терапия. Гел-имплантът е алтернативно средство за лечение при пациенти с глаукома както като самостоятелна опция, така и при пациенти с катаракта и глаукома заедно.

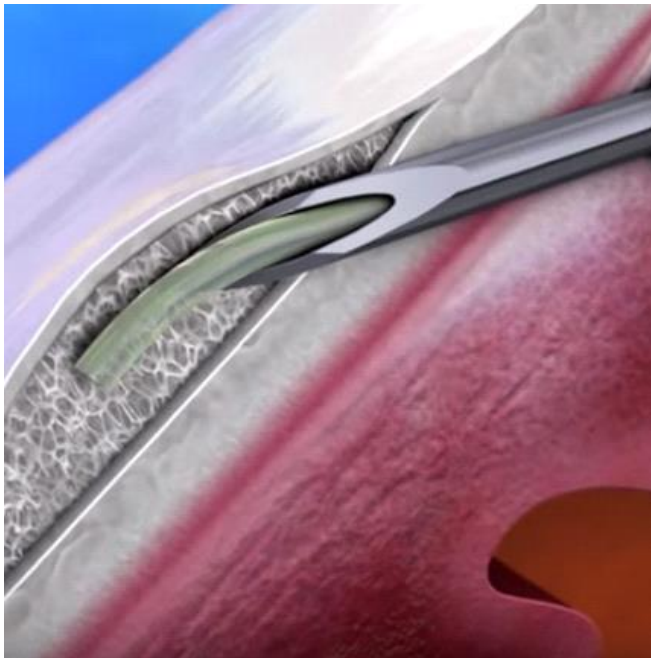
Ключови думи: IOP, ВОН, XEN

ВЪВЕДЕНИЕ

XEN / Allergan/, е миниинвазивен, субконюнктивен желатиноподобен имплант, който се използва за лечение на високо ВОН при пациенти с откритоъгълна Глаукома, неповлияващи се от медикаментозна терапия, както и при пациенти в комбинация с катарактна хирургия. фиг. 1 и фиг.2.



фиг.1

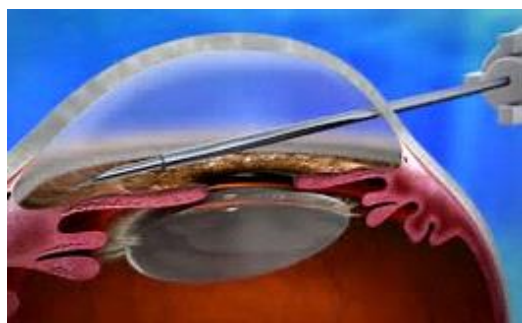


фиг.2

XEN води до редуция на вътреочното налягане, използвайки същите принципи като конвенционалната трабекулектомия, без необходимостта от инцизия на конюнктивата или наличието на склерален флеп. Имплантът е с вътрешен диаметър 45 микрона, който генерира ВОН между 5-8 mm Hg, и намалява риска от постоперативна хипотония. Самият имплант се поставя с наконечник с предпазител, субконюнктивно, който се адаптира към подлежащата тъкан и следва физиологичните движения на очите. фиг.3. и фиг.4



фиг.3



фиг.4

XEN образува нов отводящ път за повишеното количество преднокамерна течност, от преднокамерният ъгъл до субконюнктивното пространство, с нов блеб.

МАТЕРИАЛ

За периода от март 2017-септември 2017 г. са оперирани 8 пациенти, 10 очи. При 4 от пациентите е извършена комбинирана факохирургия, поради катаракта, и поставяне на XEN имплант, поради високо ВОН. При всички пациенти е установена Глаукома с открит ъгъл, на дългогодишна медикаментозна антиглаукомна терапия.

За определяне на подходящ пациент, за поставяне на XEN, съществуват включващи и изключващи критерии:

1. Включващи критерии
 - ВОН между 18-33 mm Hg
 - видим трабекуларен апарат
2. Изключващи критерии
 - Закритоъгълна/ вторична глаукома
 - предишна антиглаукомна оперативна интервенция
 - очни възпалителни заболявания

МЕТОДИКА

Гел-имплантът се поставя самостоятелно и/или в комбинация с факоемулсификация.

- може да бъдат оперирани и двете очи, последователно с 30 дни разлика.
- Уточняване мястото за поставяне на XEN, преди инцизиите - къде точно ще са основната инцизия и side port; маркира се таргетната зона; проверява се инжекторът.
- Инжектора винаги трябва да бъде в хоризонтално положение, успоредно на очната повърхност; докато иглата с импланта е в инжектора, не се упражнява натиск върху него.
- в Предна камера се поставя вискосубстанция
- Поставяне на иглата през склерата - на около 3-3.5 mm; като мястото върху конюнктивата преди това е белязано с маркер и поставяне на Митомидин субконюнктивно;
- завъртане на буталото на инжектора на 45° и поставяне на импланта.
- проверява се дали импланта е видим под конюнктивата - добре оформен блеб, горе назално на 3.5 mm от лимба.

МОНИТОРИРАНЕ НА ПАЦИЕНТИ И ПОСТОПЕРАТИВНО МАНИПУЛИРАНЕ

- Редовно мониториране на ВОН, между 12-14 mm Hg - 6 месеца

- стероидни капки - 4 пъти дневно - 1 месец

- антибиотични капки - 4 пъти дневно - 1 седмица

Постоперативно мониториране на пациенти след 1 седмица - при нормално ВОН и високо ВОН.

- при нормално ВОН - XEN имплантът изглежда плосък на конюнктивната повърхност, добре оформен блеб, ВОН варира между 12-15 mm Hg.

- при повишено ВОН - блеб не се наблюдава, фиброза на тъканите, ВОН е повишено >20 mmHg.

ЗАКЛЮЧЕНИЕ

- При всички очи, на които се постави XEN - се постигна таргетно налягане 12-14 mmHg, без медикаментозна

терапия, за 6 месеца остана в същите стойности на ВОН.

-с XEN няма нужда от шев на конюнктивна, както и риска от постоперативни компликации е в много нисък процент.

-сравнително бърза и безкръвна манипулация, изискваща минимални усилия

КНИГОПИС: АЛЕРГАН, СОБСТВЕНИ РЕЗУЛТАТИ 2017

REFERENCES

- [1] Adhikari, S., Paudel, N., Adhikari, P., Shrestha, G. S., & Shrestha, J. B. (2013). Screening Preschool Children for Visual Disorders: A Pilot Study. *Optometry & Visual performance*, 1(6)202-207 202-203.
- [2] Groenewoud, J.H., Tjiam, A.M., Lantau, V.K., Hoogeveen, W.C., Tjeerd H. N. de Faber, J., Juttman, R.E., de Koning, H.J., Simonsz, H.J. (2010). Rotterdam Amblyopia Screening Effectiveness Study: Detection and Causes of Amblyopia in a Large Birth Cohort. *Investigative Ophthalmology & Visual Science*, 51, 3476-3484.
- [3] Kvarnström, G. Jakobsson, P. Lennerstrand, G. (2001). Visual screening of Swedish children: An ophthalmological evaluation. *Acta Ophthalmologica*, 79(3), 240-244.
- [4] Murthy, G.V., Gupta, S.K., Ellwein, L.B., Muñoz, S.R., Pokharel, G.P., Sanga, L. Bachani, D. (2002) Refractive Error in Children in an Urban Population in New Delhi. *Investigative Ophthalmology & Visual Science*, 43, 623-631
- [5] Janev, K.G. (2002). *General Ophthalmology*. Skopje: Menora
- [6] Gerhard K. Lang, M. (2000). *Ophthalmology*. New York: Thieme Stuttgart.
- [7] Cynthia A. Bredford, M. (2010). *Basic Ophthalmology*. Skopje: Tabernakul.
- [8] Barnes, M., Williams, C., Lumb, R., Harrad, R.A. et al. (2001). The prevalence of refractive errors in a UK birth cohort of children aged 7 years. *Investigative Ophthalmology & Visual Science*, 42:S389
- [9] Preslan, M.W. Novak, A. (1996). Baltimore Vision Screening Project. *Ophthalmology*, 103, 105-9
- [10] Naidoo, K.S., Raghunandan, A., Mashige, K.P., Govender, P., et al. (2003). Refractive error and visual impairment in African children in South Africa. *Invest Ophthalmol Vis Sci*;44:3764-70.
- [11] He, M., Zeng, J., Liu, Y., Xu, J., et al. (2004) Refractive error and visual impairment in urban children in southern China. *Investigative Ophthalmology & Visual Science*, 45:793-9.
- [12] P Jamali et al. (2009). Refractive Errors and Amblyopia in Children Entering School: Shahrood, Iran *Optom Vis Sci* 86 (4), 364-369.
- [13] Logan, N.S., Shah, P., Rudnicka, A.R., Gilmartin, B., G. Owen, C.G. (2012). Uncorrected Refractive Error in School Children in England, UK. *Investigative Ophthalmology & Visual Science*, 53, 2311