

# **European science review**

**Nº 11–12 2015  
November–December**



«East West» Association for Advanced Studies and Higher Education GmbH

**Vienna  
2015**

# European Sciences review

Scientific journal  
№ 11–12 2015 (November–December)

ISSN 2310-5577

<b>Editor-in-chief</b>	Lucas Koenig, Austria
<b>Consulting editors</b>	Uwe Eisenberg, Austria Minik Olsen, Sweden
<b>International editorial board</b>	Melinda Boros, Hungary Miroslavka Murkovič, Slovenia Jana Ilyna, Russia Suleyman Suleymanov, Uzbekistan Wu Pan, China Dragan Novak, Croatia Dirk Eggers, Germany Yashkova Tatiana, Russia
<b>Proofreading</b>	Kristin Theissen
<b>Cover design</b>	Andreas Vogel
<b>Additional design</b>	Stephan Friedman
<b>Editorial office</b>	European Science Review “East West” Association for Advanced Studies and Higher Education GmbH, Am Gestade 1 1010 Vienna, Austria
<b>Email:</b>	info@ew-a.org
<b>Homepage:</b>	www.ew-a.org

**European Science Review** is an international, German/English/Russian language, peer-reviewed journal. It is published bimonthly with circulation of 1000 copies.

The decisive criterion for accepting a manuscript for publication is scientific quality. All research articles published in this journal have undergone a rigorous peer review. Based on initial screening by the editors, each paper is anonymized and reviewed by at least two anonymous referees. Recommending the articles for publishing, the reviewers confirm that in their opinion the submitted article contains important or new scientific results.

#### **Instructions for authors**

Full instructions for manuscript preparation and submission can be found through the “East West” Association GmbH home page at: <http://www.ew-a.org>.

#### **Material disclaimer**

The opinions expressed in the conference proceedings do not necessarily reflect those of the «East West» Association for Advanced Studies and Higher Education GmbH, the editor, the editorial board, or the organization to which the authors are affiliated.

#### **© «East West» Association for Advanced Studies and Higher Education GmbH**

All rights reserved; no part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without prior written permission of the Publisher.

Typeset in Berling by Ziegler Buchdruckerei, Linz, Austria.

Printed by «East West» Association for Advanced Studies and Higher Education GmbH, Vienna, Austria on acid-free paper.

regulatory index  $CD4^+/CD8^+$ ) by means of expressed decrease of helper line of immunity, testifying suppressor character of immune response. Identical picture was observed in the patients with chronic herpetic injure of eyes. So there was 1.2 fold decrease of  $CD3^+$  lymphocytes, 1.1 fold  $CD20^+$  lymphocytes, and 1.3 fold decrease of IRI ( $CD4^+/CD8^+$ ). As a result of the performed therapy patients with primary episode of the disease with ophthalmic Herpes had some positive dynamics (1.03 fold rise of  $CD3^+$  and  $CD20^+$  lymphocytes, 1.2 fold increase of IRI level by means of significant increase of helper subpopulation of T-lymphocytes, while in cases of relapse of chronic disease we observed its absence ( $CD4^+$  lymphocytes —  $19.37 \pm 0.37$  before and  $19.37 \pm 0.31$  after the therapy) or even negative dynamics of some values of cell-mediated immunity ( $CD8^+$  lymphocytes —  $18.44 \pm 0.49\%$  before and  $17.89 \pm 0.34\%$  after the therapy). In relation to that there is notable reliable increase of immune regulatory index in the primary episode ( $0.98 \pm 0.04$  before and  $1.13 \pm 0.03$  after the therapy) and absence of IRI dynamics in relapse cases ( $1.07 \pm 0.03$  before and after the therapy —  $1.09 \pm 0.03$ ).

Analysis of the obtained data showed the highest values of ACL to TAG of cornea and vascular membrane both in the primary episode and relapse of chronic ophthalmic Herpes ( $7.00 \pm 0.50\%$ ;  $7.44 \pm 0.35\%$ ;  $6.03 \pm 0.35\%$  and  $7.48 \pm 0.41\%$ , respec-

tively), reliably different from the normal values. Less expressed pathologic disorders were also observed in crystalline lens and corpus vitreous of eyes both in primary episode ( $3.76 \pm 0.18\%$  and  $3.28 \pm 0.21\%$ , respectively), and recurrent ophthalmic Herpes ( $3.48 \pm 0.20\%$  and  $3.83 \pm 0.22\%$ , respectively). Values change ratio in relation to the values before the therapy showed that more expressed dynamics of recovery of pathologic impairments was noted in the primary episode (1.4 fold to ACL to TAG of cornea, 1.3 ACL to TAG of crystalline lens and vascular membrane) in comparison with the relapse (1.2 fold to ACL to TAG of cornea and vascular membrane, 1.1 fold ACL to TAG of crystalline lens).

**Conclusion.** Thus, the obtained results show the presence of deep secondary immune deficiency status with expressed misbalance of immune regulatory subpopulations of lymphocytes ( $CD4^+$  and  $CD8^+$  lymphocytes), with expressed decrease of IRI indicating suppressive character of immune reaction of an organism and deep destructive alterations in the tissues of eyes, confirmed by high values of ACL to TAG of cornea, vascular membrane, crystalline lens and corpus vitreous. After the performed common pathogenetic therapeutic measures the more expressed dynamics of the recovery of pathologic impairments was noted in the primary episode of ophthalmic Herpes, then in chronic recurrent forms of the disease.

### References:

1. Dolgikh T. I. Immunologic characteristics of first time herpetic infection. /Dolgikh T. I., Yerшов A. V., Minakova Y. U., Zapariy N. S. // Infectious diseases, 2010; 8 (1): 25–28.
2. Isakov V. A. Herpes viral infection. /Isakov V. A., Romantsev M. T., Ribalkin S. B. // Recommendations for doctors. — St. Petersburg, 2006; 95.
3. Kuskova T. K. Family of herpes viral at the modern stage. /Kuskova T. K., Belova Y. G. // MSMSU, Moscow, GP. 2004; 5: 48–58.
4. Makarova T. Y. Herpetic infection. Clinic, diagnostics, therapy /Khabarovsk, 2007; 112.
5. Khodjayeva A. S. Herpes-viral infections, variants of clinical manifestations, diagnostics and therapy // Med. Jour. Uzbekistan. 2010; 1: 50–54.

*Tolibov Dilshod Sirojovich,  
Tashkent Medical Academy, postgraduate student,  
assistant of Department of Neurology  
E-mail: dr.dilshodts@mail.ru*

*Rakhimbaeva Gulnora Sattarovna,  
Tashkent Medical Academy, PhD, doctor of medical science,  
head of Department of Neurology  
E-mail: rakhimbaevags@mail.ru*

## Application of the new diagnostic complex of biomarkers in patients with Alzheimer's disease and vascular dementia

**Abstract:** The article presents data on new methods of diagnostics of Alzheimer's disease in a comparative perspective with using the ischemic scale of Khachinsky. In this regard, we studied 147 patients, who were divided into 3 groups. In the research we found that the use of our diagnostic method increases the diagnostic value of using ischemic scale of Hachinski.

**Keywords:** Alzheimer's disease, scale of Khachinsky, beta-amyloid protein, apolipoprotein E4, dehydroepiandrosteron sulfate.

Alzheimer's disease is a progressive neurodegenerative lesion with individual characteristics of the course and severity of symptoms, as well as multiple converging etiopathogenetic mechanisms. The etiology of this lesion is not fully understood. Some researchers suggest that the convergence of such risk factors as advanced age, presence of epsilon 4 genotype lipoprotein E, obesity, insulin resistance, vascular factors, dyslipidemia, hypertension and inflam-

matory markers [1, 475–481] launches pathophysiologic cascade which lead to pathology of Alzheimer's type and developing of dementia [2, 1364–1370]. Modern understanding of Alzheimer's disease is based on the gradual biological changes that occur, apparently, decades before the first symptoms. Today, great importance is given to potential biomarkers that can detect biological changes [3, 49–70]. Nowadays there is no biomarker which for self-use in clinic

could be a decisive factor in the diagnosis of Alzheimer's disease. This is primarily due to the definition of cross-known biomarkers correlated as with the course of Alzheimer's disease as with other pathologies of the nervous system. In this regard, we have put forward the hypothesis of the complex use of the most important biomarkers for early diagnosis and monitoring the effectiveness of therapy and identifying groups of risk for Alzheimer's disease. The essence of the hypothesis is a one-time determination of a number of biomarkers in patients (dehydroepiandrosteron sulfate (DHEA-S), apolipoprotein E4 (ApoE-4) and beta-amyloid protein ( $A\beta 1-42$ )) and according to discriminatory levels of these compounds developing an appropriate diagnosis or putting the patient to the risk of developing Alzheimer's disease. When creating this hypothesis, we proceeded from the known data of modern research, a model describing the pathogenesis of Alzheimer's disease, which can be used for potential therapeutic approaches [4, 30025–30035].

We combined our proposed diagnostic complex biomarkers with ischemic Khachinsky scale [5, 315–326]. Ischemic scale Khachinsky [6, 1084–1085] includes criteria for assessing the patient's condition and conduction etiology of the pathological process. According to the scale Khachinsky, score more than 7 points suggests a vascular cause of dementia, and less than 4 points — does not confirm the vascular etiology of the process, 4–7 score does not allow one to determine the probable cause of dementia. The most significant signs of ischemic scale Khachinsky that differentiate vascular dementia from Alzheimer's disease, is an acute onset, progression and step-fluctuating course of the disease, presence of hypertension, previous stroke and focal neurological symptoms. Ischemic Scale Khachinsky helps to differentiate vascular dementia from Alzheimer's disease, but its value for the diagnosis of vascular dementia without strokes, as well as of mixed dementia remains low. Using this scale is possible only for one option — vascular dementia with strokes.

The aim of this work was to correlate the expression of biomarkers (beta amyloid protein ( $A\beta 1-42$ ), apolipoprotein E4 (ApoE-4),

dehydroepiandrosteron sulfate (DHEA-S)) in patients with varying degrees of intensity by Khachinsky scale.

We studied 147 patients with verified diagnosis of Alzheimer's disease (n=17), early Alzheimer's disease (n=30) and chronic cerebral ischemia (n=100).

The average age of patients with Alzheimer's disease was  $71,05 \pm 1,15$  years, with early AD —  $57,2 \pm 0,92$  years, with chronic brain ischemia —  $67,18 \pm 1,06$  years. In Alzheimer's disease, women accounted for  $47,1 \pm 12,1\%$  of the number of studied patients, with the diagnosis of early Alzheimer —  $50,0 \pm 9,1\%$ , with chronic brain ischemia —  $61,0 \pm 4,9\%$ . In Alzheimer's disease patients under the age of 60 years were not found, and the distribution of patients in the age period 61–70 years and older than 70 years were approximately equal. At an early stage of Alzheimer's disease a significant portion of patients ( $73,3 \pm 8,1\%$ ) was under 60 years (age between 40–60 years), while there were no patients over 70 years. In chronic brain ischemia, most patients were older than 70 years ( $40,0 \pm 4,9\%$ ), but the proportion of patients in the age groups 40–60 years and 61–70 years was also significantly ( $25,0 \pm 4,3\%$  and  $35,0 \pm 4,8\%$ , respectively).

Test biomarkers were determined in blood serum. Determination of beta-amyloid 1–42 protein ( $A\beta 1-42$ ) was performed using of commercial kits for ELISA studies Human amyloid beta 1–42 ( $A\beta 1-42$ ) ELISA Kit (EASTBIOPHARM, China), determination of apolipoprotein E4 was performed using commercial kits Human Apolipoprotein E4 (Apo-E4) ELISA Kit (EASTBIOPHARM, China), the definition of dehydroepiandrosteron sulfate (DHEA-S) was carried out using commercial kits ImmunoFA-DGEA-S (Immunotex, Russia).

#### Results and Discussion

The results of expression of biomarkers (beta amyloid protein ( $A\beta 1-42$ ), apolipoprotein E4 (ApoE-4), dehydroepiandrosteron sulfate (DHEA-S)) in patients with varying degrees of intensity are given on a scale Khachinsky listed in the table (Table 1).

Table 1. – Results of biomarkers' rates in patients with varying severity on a scale Khachinsky (n = 147)

		Early AD (n = 30)	Correlation coefficient	AD (n=17)	Correlation coefficient	Chronic cere- bral ischemia (n=100)	Correla- tion coef- ficient	
Number of points on the scale Khachinsky	Less 4	Number of patients (abs), %	$50,0 \pm 9,13\%$ (15)		$47,1 \pm 12,1$ (8)	–		
		$A\beta 1-42$ , pg/ml	$390,8 \pm 11,21$	–0,268	$600,0 \pm 16,58$	0,018	–	
		ApoE-4, ng/ml	$29,75 \pm 1,09$	–0,371	$59,2 \pm 2,31$	–0,504	–	
		DHEA-s, mmol/l	$0,16 \pm 0,01$	0,277	$0,13 \pm 0,01$	0,408	–	
	4–7	Number of patients (abs), %	$50,0 \pm 9,13\%$ (15)		$52,9 \pm 12,1$ (9)		–	
		$A\beta 1-42$ , pg/ml	$404,6 \pm 12,98$	0,137	$637,7 \pm 25,77$	0,203	–	
		ApoE-4, ng/ml	$31,3 \pm 1,33$	0,23	$63,7 \pm 2,83$	0,674	–	
		DHEA-s, mmol/l	$0,13 \pm 0,01$	0,574	$0,2 \pm 0,02$	–0,199	–	
	More 7	Number of patients (abs), %	–		–		100,0% (100)	
		$A\beta 1-42$ , pg/ml	–		–		$313,6 \pm 4,78$	0,142
		ApoE-4, ng/ml	–		–		$21,2 \pm 0,44$	0,087
		DHEA-s, mmol/l	–		–	0,142	$1,14 \pm 0,09$	–0,022

In patients with chronic cerebral ischemia score was greater than 7, the average was  $10,9 \pm 0,13$ . This allows you carry this contingent of patients safely to the group with vascular neurodegenerative disease. In patients with early AD points were from  $50,0 \pm 9,13\%$ , in the «gray zone» from 4 to 7, what doesn't allow, according to the scale Khachinsky, to diagnose neurodegenerative disorders. How-

ever, determination of biomarker complex ( $A\beta 1-42$ , ApoE-4 and c-DHEA) showed that the levels of these diagnostically significant proteins are comparable to values in patients with early stage AD:  $A\beta 1-42$  above 400 pg/ml, ApoE 4 above 31,0 ng/mL DHEA-to below 1,0 mol/l; patients with vascular cause of pathological states of the brain —  $A\beta 1-42$  above  $313,6 \pm 4,78$  pg/ml, ApoE 4 above

21,2±0.44 ng/mL DHEA-c 1,14±0,09 m.mol/l. Thus, differences in performance between two groups are significant (between Aβ1-42-29,0%, ApoE-4-47,6%, DHEA-S — 8,7 times) allows surely include patients with a score 4-7 by scale Khachinsky to a group with symptoms of Alzheimer's disease.

In patients with AD number of patients with the distribution of points in the «gray zone,» i. e. in the range from 4 to 7, have been significant — 52,9 ± 12,1%. Here, the markers have been correlated with those values characteristic of already developed AD: Aβ1-42 above 600 pg/ml, ApoE-4 above 60.0 ng/mL DHEA-S is below 1.0 mmol/L. That is, the use of complex biomarkers not only help the distribution of patients in a particular group whose scores

on a scale Khachinsky not to allow confidently diagnose the cause of a neurodegenerative condition, but also to diagnose a specific pathology under the discriminatory levels of expression of the markers.

#### Conclusion

In favor of the effectiveness of complex biomarkers with a score on a scale Khachinsky used work says that a significant number of patients who fall into a “gray zone” of the scale (4-7), where it is difficult to determine the cause of neurodegenerative disease. The proportion of these patients in our study was 51.06% in the group diagnosed with early AD and AD. Thus, the use of diagnostic complex biomarkers in patients with neurodegenerative disorders improves the efficiency and diagnostic value of using of scale Khachinsky.

#### References:

1. Be la Monte S. M. Insulin resistance and Alzheimer's disease, *BMB Reports*, 42 (8), 2009.
2. Diaz M. C., Rosales R. L. A Case Report on Dyskinesia Following Rivastigmine Patch 13,3mg/24hours for Alzheimer's Disease: Perspective in the Movement Disorders Spectrum Following Use of Cholinesterase Inhibitors, 94 (34), 2015.
3. Schneider J. A., Montine T. J., Sperling R. A., Bennet D. A. Neuropathological Basis of Alzheimer's Disease and Alzheimer's Disease Diagnosis, 28, 2012.
4. Kann O. The interneuron energy hypothesis: implications for brain disease, *Neurobiol. Disease*, S0969-9961 (15), 2015.
5. Szigeti K. New Genome-Wide Methods for Elucidation of Candidate Copy Number Variations (CNVs) Contributing to Alzheimer's Disease Heritability, *Methods Mol. Biol*, 1303, 2015.
6. Khachinsky V., Oveisgharan S., Shankle W. R. Atrial fibrillation and the Khachinsky ischemic scale-reply, *Arch. Neurol.*, 69 (8), 2012.

*Tursunhojaeva Shoirra Utkurovna,*  
senior scientific assistant, applicant to Forensic medicine and medical law department  
with the course of pathologic anatomy and section course, Tashkent pediatric medical institute  
E-mail: mbshakur@mail.ru

## Morphological researches of liver at chronic intoxications with drugs and alcohol and their combination

**Abstract:** The received results help to recommend for differential diagnostics CDI and CAI research of such parameters of a hepatic tissue, as a share of parenchyma, having on fatty vacuoles and on intralobular infiltrates, perimeter and the area of section of a portal tract, extent of the focuses of destruction of a boundary plate along perimeter of a portal tract, average quantity of ductules in a portal tract, shares of a cut of the portal tract, occupied with cells of inflammatory infiltrate and vessels, shares of fibroblasts, macrophages, lymphocytes, neutrophiles and plasmatic cells as a part of inflammatory infiltrate.

**Keywords:** liver, drugs, alcohol, morphological changes.

One of the most typical diseases of drug-adductors (especially at intervenous injections of drugs) a chronic hepatitis of viral etiology is considered. However the data of the public literature about character and distribution of liver damages at drugs intoxication, as a rule, are not full and extremely contradictory. For instance, a role of drugs in liver damage pathogenesis is still unclear. There are not found the data about liver damages at combined intoxication with drugs and alcohol. There is questionable issue of differences in duration and morphology of viral hepatitis on the background of drug-adduction and at patients, not abusing drugs [1].

In the present time the forensic-medical diagnostics of drugs intoxication is based in complex of morphological data and results of these substances presence in the biological fluids and tissues of corpse. The forensic-chemical research helps to find out not only a type of drug, but also the duration, passed from the last time drug injection and an injected dosage according to the drug concentration in tissues, blood and urine. The interpretation of patomorphogenesis and tanatogenesis at drug-adduction is complicated by variety of effects of psychotropic drugs and impurities, and also

defeat of many systems with disorder of intersystem bonds at various levels of an organism [3; 7].

Under the modern data, replication of hepatitis viruses comes to light at 97,8% of the addicts taking heroin intravenously. Prevalence of an infection of a virus of a hepatitis B among addicts makes actual studying of its specificities in this population [4].

According to forensic-chemical researches and morphological signs it is possible to draw a conclusion on rather frequent combination of a narcotism with abusing alcohol. In the literature there are data that abusing alcohol raises activity of a chronic virus hepatitis C, in particular, due to the strengthening of step necrosis [5]. Accordingly there should be accelerated development of cirrhosis too. Besides, acceleration of fibrosis and a cirrhosis can be somewhat caused in addicts by the raised frequency of mix-hepatitis (B+C) in this population. According to our supervision and the literature data [4], mix-hepatitis is differed from monoetiological by strengthening of necrotic and inflammatory processes that is shown, first of all, by high activity of a portal hepatitis.

At this stage of our researches we used histomorphometric method of research of a liver tissue at a chronic alcoholic intoxica-

# Contents

<b>Section 1. Biology</b> .....	<b>3</b>
<i>Oroka Frank, Ureigho Nelly</i> Ethnobotanical assessment of indigenous wild and semi-wild fruits for medicine and food in delta state Nigeria.....	3
<b>Section 2. Geography</b> .....	<b>6</b>
<i>Miulgauzen Daria Sergeevna, Pankratova Lubov Alexandrovna</i> The problem of aerotechnogenic pollution in urban settlement Nickel (Murmansk region) .....	6
<i>Tojieva Zulkhumor, Dusmanov Farhod Azamkulovich</i> Geo-demographic features of national composition of Uzbekistan's population .....	7
<b>Section 3. Geodesy</b> .....	<b>9</b>
<i>Gurbanov Chingiz Ziyadkhan, Aliyev Elvin Muhammad</i> Geoinformation analysis in clarifying of the geodesic network.....	9
<b>Section 4. Study of art and cultural studies</b> .....	<b>14</b>
<i>Kasianenko Karolina Mihailovna</i> In search of the origins of the Ukrainian game children's book .....	14
<b>Section 5. Mathematics</b> .....	<b>18</b>
<i>Drushinin Victor Vladimirovich, Lazarev Alexey Alexandrovich, Smagin I. R., Hromov N. O.</i> Summary carmichael numbers .....	18
<i>Khubaev Georgy N., Scherbakov Sergey M., Shirobokova Svetlana N.</i> Conversion of ideo3 models into UML-diagrams for the simulation in the sim system-UML .....	20
<b>Section 6. Medical science</b> .....	<b>26</b>
<i>Abdullaeva Vasila Karimbekovna</i> Features motivational orientation of patients with heroin addiction .....	26
<i>Azizova Farida Fakhitdin qizi</i> Hemodynamic responses to rapid changes of intra-abdominal pressure in patients with cholecystitis .....	28
<i>Aliev Mansur Abdukholikovich, Mamadaliev Abdurakhmon Mamatkulovich, Mamadalieva Saodat Abdurakhmonovna</i> The study of the results of endolumbal insufflation of ozone and pyracetam in the treatment of posttraumatic epilepsy.....	29
<i>Alimov Aziz Pulatovich, Kamalov Zaynitdin Sayfutdinovich, Azizov Mirhakim Javharovich, Aripova Tamara Uktamovna</i> Immunity state on the background of osteotropic therapy with medicine calcium D3 in endoprosthesis of the knee joint.....	33
<i>Amonov Aminjon Shavkatovich</i> Etiology, clinical forms and methods of the sensorineural hearing loss treatment (review of the literature) .....	37
<i>Amonov Aminzhon Shavkatovich, Vladislav Evgenevich Kuzovkov</i> Cochlear implantation in children with the inner ear congenital dysgenesis — monдини anomaly .....	40
<i>Arifdjanov Nodir Sobirovich</i> Peculiarities of the therapy of cicatrix stenosis of esophagus in children in remote period after burn .....	42
<i>Asadov Damir Abdurahimovich, Rakhimov Maksudbek Kalandarovich, Nurullayev Rustam Babajanovich</i> Improve the quality of urological care in patients with uncomplicated urinary tract infections in primary care health of the republic of Uzbekistan .....	44
<i>Ataniyazov Makhsudjan Kamaladdinovich</i> A comparative clinical and catamnestic analysis of long-term results of carotid endarterectomy in stenosing carotid lesions .....	47

*Atakhanova Dilbar*

Hygienic assessment of long-term dynamics of the quality of water supplied to the population with centralized and decentralized water supply .....	49
<i>Atakhodzhaeva Gulchekhra Abdunabievna, Rakhimov Shukhrat Malicovich</i>	
Anti-remodeling efficiency of preparations such as perindopril, veroshpiron and bisoprol applied to patients with chronic heart failure and metabolic syndrome .....	53
<i>Atakhodzhaeva Gulchekhra Abdunabievna, Rakhimov Shukhrat Malicovich, Karimdjanova Guzal Akmaljanovna, Igamberdieva Ranokhon Shukhratkhodjaevna</i>	
The role of metabolic syndrome in the nature of postinfarction remodeling of the heart in patients with chronic heart failure .....	57
<i>Akhmedov Khalmurad, Rakhimova Matluba, Nargiza Abdurakhmanova, Feruza Khalmetova</i>	
Comparative characteristics of clinical and functional parameters of rheumatoid arthritis, depending on the zone of residence .....	59
<i>Akhmedova Sayora Muhammadovna</i>	
Creation of the informational model of toxic myocarditis occurred under the influence of pesticides .....	61
<i>Ashurov Zarifjon Sharipovich</i>	
Addictive patients with deviant behavior and their relatives .....	64
<i>Ashurova Dilfuza Tashpulatovna</i>	
Efficacy assessment of the activities for prophylaxis of micro nutrients deficit in children .....	65
<i>Babadjanov Oyibek Abdujabbarovich, Arifov Saidkosim Saidazimovich</i>	
Role of G308A polymorphism of TNF- $\alpha$ gene in the formation of rosacea .....	67
<i>Basharova Laylo Maratovna</i>	
Hysical fitness of preschool educational institutions children of Uzbekistan .....	69
<i>Djurayev Akhrorbek Makhmudovich, Valiyeva Kamola Nurullayevna, Rustamova Umida Mukhtarovna, Rakhmatullayev Khayrulla Rakhmatullayevich</i>	
Operative surgery of aseptic necrosis of caput femori in children .....	71
<i>Magrupov Bokhodir Asadullaevich, Vervekina Tatyana Anatolevna, Ubaydullaeva Vladlena Ulugbekovna</i>	
Characteristics of inflammation mediators changes at calculous cholecystitis .....	72
<i>Vokhidov Ulugbek Nuridinovich, Akhundjanov Nozim Obidovich</i>	
Features of mesenchymal formations of chronic polypoid rhinosinusitis .....	76
<i>Eshnazarov Kamolhuja Eshnazarovich, Jae Han Ko, Asilova Saodat Ubaevna, Khaydarov Azizjon Qosimovich, Hyoung-Sik Kim, Hyoung-Sik Kim</i>	
How changed publication of hip and knee arthroplasty between 2005–2014 years. What we missed? .....	78
<i>Zakirkhodjayev Murod Asrorovich</i>	
New approaches to diagnostics and conservative therapy methods of flat-footedness in children .....	82
<i>Zakirkhodjaev Sherzod, Shamsutdinova Maksuda Ilyasovna, Kamalov Zaynitdin Sayfutdinovich</i>	
Features the production of cytokines in chronic pancreatitis and pancreatic cancer .....	84
<i>Zufarov Aziz Alimdjaniyevich</i>	
Acute respiratory syndrome and spectral characteristics of cardiac rhythm in children and its cause-effect interrelations .....	86
<i>Ibragimova Nargiza Sayfutdinovna</i>	
Effect of the type of vegetative nerve system on the quality of life of the patients with itching in old and senile age .....	88
<i>Ikramov Adkham Ilkhamovich, Magrupov Bakhodir Asadullaevich, Nizamova Madina Mirgabtizyanovna, Ubaydullaeva Vladlena Ulugbekovna, Sattarov Hasan Ilkhamovich</i>	
Differential diagnosis of cardiogenic and membranogenic pulmonary edema in medical radiology .....	90
<i>Irsalievna Fatima Khusnutdinovna, Kamalov Zaynitdin Sayfutdinovich</i>	
Immune status parameters and prognosis of the efficiency of allergen-specific immunotherapy in patients with persistent allergic rhinitis .....	96

<i>Israilov Xikmatjon Tuygunovich</i>	
The study of clinical manifestations and status of immune-interferon system in patients with recurrent genital Herpes . . . . .	100
<i>Israilova Nigora Amanullaevna</i>	
Possibilities of prediction of the development of cardio-vascular complications in acute pneumonia in young age children . . . . .	102
<i>Karabayeva Indira</i>	
The state of immune reactivity in patients with microsporia . . . . .	104
<i>Karimov Shavkat Ibragimovich, Berkinov Ulugbek Bozorbaevich, Sakhiboev Dilshod Parpijalilovich</i>	
The results of treating of adrenal genesis hypertension through different surgical methods . . . . .	106
<i>Kuzibaev Jamshid Muminovich, Makhkamov Kozim Ergashevich</i>	
Secondary brain damage due to progressive traumatic subdural hematoma . . . . .	110
<i>Kuzibaev Jamshid Muminovich, Makhkamov Kozim Ergashevich</i>	
Secondary intracerebral hemorrhage following traumatic brain injury . . . . .	114
<i>Karimova Feruza Dzhavdatovna, Mamadazimova Dilorom Fayzymamatovna</i>	
Status of the cervix in the forecast of labor in post-term pregnancy . . . . .	117
<i>Mamadazimova Dilorom Fayzymamatovna, Karimova Feruza Dzhavdatovna</i>	
Some features of hemodynamics in prolonged pregnancy according to doppler . . . . .	118
<i>Mamadaliyev Akmal</i>	
Neuropsychological and electroencephalographic correlates of damaged and intact hemisphere in left hemisphere insult . . . . .	119
<i>Zufarov Mirjamol Mirumarovich, Makhkamov Najmiddin Kozimovich, Babadjanov Sandjar Abdumurodovich</i>	
Characteristics of multi spiral angiography in patients with multi focal atherosclerosis . . . . .	121
<i>Makhkamov Makhkamjon Kozimovich</i>	
Lateral supra orbital approach to circle of Willis aneurysm . . . . .	123
<i>Masharipov Fakhridin Ataevich, Musayev Tahir Sadikov, Dadamyants Natalia Gamletovna, Nizov Oleg Nikolayevich, Akhmedov Rustam Alimdzhanovich</i>	
Dynamics of brachial artery blood flow indexes at complicated transcondylar and supracondylar humeral fractures in children . . . . .	124
<i>Mirzaxmedov Murad Mirchaidarovich</i>	
Methods of surgical treatment and postoperative complications of hirschsprung's disease in adults . . . . .	127
<i>Navruzov Sarimbek Navruzovich, Mirzaxmedov Murad Mirchaidarovich</i>	
Comparative evaluation of various surgical corrections of hirschsprung's disease in adults . . . . .	129
<i>Muminova Sevara Rustamovna, Mavlyanova Shakhnoza Zakirovna, Boboev Kodir</i>	
Molecular-genetic aspects of atopic dermatitis . . . . .	131
<i>Novikova Liliya Boreevna, Izhibuldina Gulnara Ildusovna</i>	
Prevalence of abnormal glucose metabolism in the acute phase of ischemic stroke in diabetic and nondiabetic patients . . . . .	134
<i>Akilov Habibullah Ataulaevich, Primov Farhod Sharifzhanovich</i>	
Long-term results of the splenectomy with heterotopic transplantation of splenic tissue in children with injuries of the spleen . . . . .	136
<i>Akilov Habibullah Ataulaevich, Primov Farhod Sharifzhanovich</i>	
Evaluation of the results of immediate postoperative period in children with injuries of spleen after splenectomy . . . . .	138
<i>Pulatova Iroda Zakirkhodjaevna, Isamukhamedova Mukharam Akhatovna</i>	
Diagnostic role of a Dopplergraphy and multispiral computer angiography in the assessment of prevalence of a tumoral invasion of a stomach cancer . . . . .	140
<i>Pupelytė Agnė, Kleinauskienė Rita, Rakickas Julius,</i>	
HDL, LDL, age and gender factors impact on cardiovascular disorders . . . . .	144



<i>Rajabov Askarjon Hamroqulovich, Inoyatova Flora Ilyasovna, Amonov Shavkat Ergashevich</i>	
Clinical course of chronic tonsillitis in children with chronic hepatitis B.....	148
<i>Raimkulova Dilnoza Farkhoddinovna</i>	
Lipocalin and cystatin of urine in pneumococcal pneumonia in children .....	151
<i>Rizaev Kamal Saidakbarovich, Makhamadaminov A. G., Khadjibaev Abdulkhakim Muminovich, Muhamedjanova Nailya Nakipovna</i>	
Sputum cytology indexes condition in patients with acute destructive pancreatitis .....	152
<i>Rustamova Umida Mukhtarovna</i>	
Osteoporosis and osteoarthritis in women of uzbek nationality of old age based on digital x-ray and densitometry research .....	155
<i>Sabirova Rihs Abdukadyrovna, Kulmanova Munajat Usmanovna</i>	
Mechanism of the development of apoptosis in the mucosa of the gastrointestinal tract in the mixed pathology.....	157
<i>Sirozhiddinova Khironon Nuriddinovna, Samarkand State Medical Institute, Abdullaeva Muhiba Negmatovna</i>	
Contemporary aspects of intrauterine infectivity in perinatal pathology .....	160
<i>Tashpulatova Guzal Alievna, Mavlyan-Hodzhaev Ravshan Shukhratovich</i>	
Morphological aspects of poly-organic impact of radio frequency electromagnetic radiation in experiment.....	162
<i>Tashpulatova Arofat Ziyavutdinovna</i>	
Marfan syndrome and its genealogic characteristics.....	164
<i>Temirova Saodat Yorovna</i>	
The values of cell-mediated immunity and antigen-conjugating lymphocytes in patients with Herpes viral injure of organ of vision .....	166
<i>Tolibov Dilshod Sirojovich, Rakhimbaeva Gulnora Sattarovna</i>	
Application of the new diagnostic complex of biomarkers in patients with Alzheimer's disease and vascular dementia .....	167
<i>Tursunhojaeva Shoirra Utkurovna</i>	
Morphological researches of liver at chronic intoxications with drugs and alcohol and their combination .....	169
<i>Usmonov Isomiddin Haydarovich, Tillyashayhov Mirzagolib Nigmatovich, Nazirov Primkul Khudjamovich</i>	
Clinical course and tactics of treatment of tuberculous lesions of the thoracic spine with spinal disorders .....	171
<i>Fadieienko Galyna Dmytrivna, Gridnyev Oleksiy Ievgeniovych</i>	
The influence of gastroesophageal reflux disease comorbidity on biochemical markers, data of ambulatory blood pressure monitoring and echocardiography in patients with hypertension.....	173
<i>Fattakhov Bobir Shavkatovich</i>	
The state of general and local immunity in patients with urogenital chlamydiosis .....	177
<i>Khadjibaev Abdulkhakim Muminovich, Alidjanov Fotih Bakievich, Rizaev Kamal Saidakbarovich, Makhamadaminov A. G.</i>	
Pulmonary ventilation disturbances in patients with pancreatogenic toxemia (literary review) .....	179
<i>Khaidarov Nodir Kadirovich</i>	
Ultra sound diagnostics of brachiocephal arteries in multifocal atherosclerotic damage .....	183
<i>Berkinov Ulugbek Bozorbaevich, Khalikov Sarvar Pulatovich</i>	
Treatment of the cicatricial tracheal stenosis.....	184
<i>Matmurodov Rustambek Jumanazarovich, Khalimova Khanifa Mukhsinovna, Rashidova Nilufar Safaevna</i>	
Neuron-specific protein s100b as a diagnostic marker parkinson's disease.....	187
<i>Khalimova Zamira Yusufovna, Kholova Dilorom Sharifovna</i>	
Study of gene — candidate marker's levels in patients with non-burdened and burdened familial history of NFPA (non-functioning pituitary adenomas) .....	189

<i>Khudaynazarova Salomat Ruzibayevna, Khasanshina Tamila Pennarovna, Alimkhodjayeva Munavvar Rashidovna</i>	
Clinical-immunologic regularities of the formation of respiratory diseases in children of the younger school age .....	192
<i>Shamsutdinova Maksuda Ilyasovna, Timme Robert, Zakirkhodjaev Sherzod</i>	
Role of cytokines in chronic pancreatitis .....	193
<i>Sharipova Nilufar Saidovna</i>	
Life style of the patients suffering with bronchial asthma .....	195
<i>Yuldasheva Dilchehra Yusuphonovna, Sadykova Dilfuza Ravshanovna</i>	
Studying the frequency of genotypes and allelic variants of the polymorphism rs1042522 gene TP53 in women with cervical intraepithelial neoplasia .....	198
<b>Section 7. Pedagogy .....</b>	<b>200</b>
<i>Grazhevskaya Oleksandra</i>	
Future teachers' nonverbal communication skill as psychological and pedagogical problem .....	200
<i>Feyzullayev Ramiz Abdulsamed, Bagirov Sabir Agabagir</i>	
The design of the subject objectives of training in engineering education .....	201
<b>Section 8. Psychology .....</b>	<b>206</b>
<i>Potapchuk Natalia Dmitrievna, Khmelniisky Bogdan</i>	
Panic in extreme situations. ....	206
<b>Section 9. Regional studies and socio-economic geography .....</b>	<b>208</b>
<i>Myrosh Mariya Vasylyvna</i>	
Human geographical aspects of ideological protests in Western region of Ukraine .....	208
<b>Section 10. Technical sciences .....</b>	<b>210</b>
<i>Hujayev Ismatulla Kushayevich, Boltibayev Shuhratjon Komiljanovich, Bozorov Orifjon Shodieievich</i>	
Distribution of periodic perturbations of mass flow of gas at the elementary linear section of pipeline .....	210
<i>Sheina Svetlana, Dietmar Wingand, Matveyko Roman, Teryukova Lidia</i>	
Management of territory development based on an integrated assessment .....	214
<b>Section 11. Economics and management .....</b>	<b>220</b>
<i>Mukhina Maria Mikhailovna, Nikishin Alexander Fedorovich, Pankina Tatiana Viktorovna</i>	
The role of image in the e-commerce .....	220
<i>Sultanov Jasur Aminbayevich, Chuponov Sanat Otanazarovich</i>	
The role of employment support centers of controlling local labour market .....	222
<b>Section 12. Science of law .....</b>	<b>225</b>
<i>Dzhansarayeva Rima Yerenatovna, Malikova Sholpan Baltabekovna</i>	
On the concept of migration policy .....	225
<i>Dzhansarayeva Rima Yerenatovna, Malikova Sholpan Baltabekovna</i>	
The definition of illegal migration .....	227
<i>Evdokimov Konstantin Nikolaevich</i>	
On the issue of criminal responsibility for the creation, use and distribution of "botnets" .....	229