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Ветеринарные науки

Биологические науки

Фармацевтические науки

Медицинские науки

[1], [2], .[3]

ИНСУЛЬТ ФАКТОР РИСКА РАЗВИТИЯ САХАРНОГО ДИАБЕТА

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STROKE AS A RISK FACTOR FOR DEVELOPING DIABETES
Abaeva K.Zh., Shuvakhina N.A., Supervisor of studies: assistant Garabova N.I.

ABSTRACT

Transient hyperglycemia accompanied by what is seen as a syndrome of hyperglycemia, which arose in response to brain catastrophe. Indicators of glucose in the blood during the acute phase of stroke depend on the nature and volume of the source of vascular lesions of the brain. The aim of the study was to investigate the dynamics of changes in blood glucose levels in the acute phase of stroke. Fasting glucose, insulin level, growth hormone level tests and the morphological study of the pancreas were used to carry out this investigation. The results of clinical and laboratory-morphological correlations revealed syndrome hyperglycemia, which wore a transient or permanent nature, depending on the severity of the stroke shape. The content of insulin was reduced, and growth hormone in the blood increased. Morphological study revealed the reduction the number and size of B-cells in the pancreas. Becomes a permanent inferiority when a defect in the islet apparatus is present in the pancreas.

Keywords: insult, hyperglycemia.

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АКТУАЛЬНЫЕ ВОПРОСЫ УЛУЧШЕНИЯ ПАТОЛОГОАНАТОМИЧЕСКОЙ ДИАГНОСТИКИ ОСТРОГО АППЕНДИЦИТА

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Resume: The problem of acute appendicitis actuality in elderly to ride by late medical help, by predominance of destructive forms of disease and by frequent development of postoperative purulent complications. Those features are largely related to lymphoid apparatus, innervation and vascularisation of appendix age-specific involution. Various aspects of morphological diagnosis in acute appendicitis, especially in elderly patients with concomitant ischaemic heart disease are taken up.

Key words: acute appendicitis, morphological diagnostics.

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ИССЛЕДОВАНИЕ ВЫБОРА ПАЦИЕНТА И ГОТОВНОСТИ ПЛАТИТЬ ЗА ЛЕЧЕНИЕ МОЛЯРА

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ABSTRACT

destroyed nerves and the willingness to pay (WTP) of the selected alternative. The study is based on

Method of research was an anonymous survey among 111 adults visiting their own dentists in the town of Plovdiv. The survey included questions about the patient choice for treatment the molar with none-vital nerves and WTP (direct open question) for the selected alternative. Demographic, socio-economic characteristics (according to Bulgarian reality) of respondents also the history, severity and frequency of dental diseases was established. None-parametric analyses were used to be found the main relationships among observed variables. Some variables were explored with descriptive and frequency analyzes.

The resulting estimates of WTP for the proposed alternatives with their standard deviation were as

to the WTP came monthly household income, urgency in the past used dental services and way of payment of dental services. Other factors like frequency of visits to the dentist, age and employment of respondents

value of oral health: willingness to pay for treatment

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– 40 % (n = 6).
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– - 46,7 % (n = 7).
– - 46,7% (n = 7).

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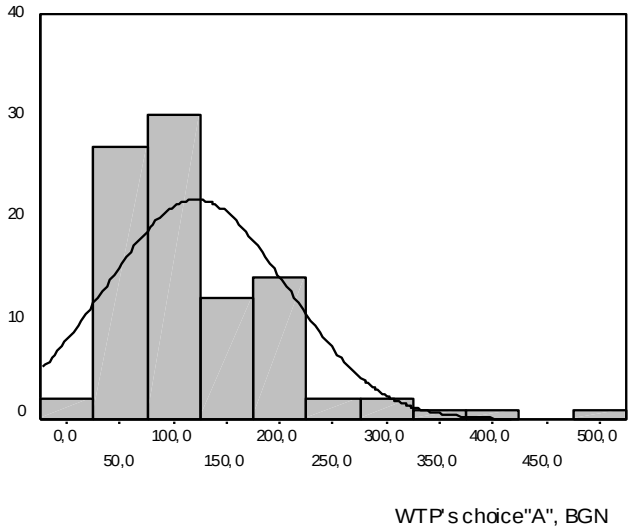

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-Smirnov Z = 1,997; P = 0,001).

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(P > 0,05).

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66; P = 0,006).

		BGN				
	2	50,00	0,00	50,00	50,00	
	16	78,75	56,32	0,00	200,00	
	23	106,09	53,49	30,00	200,00	
	10	103,00	41,20	50,00	200,00	
	6	96,67	49,26	40,00	150,00	
	14	138,57	82,26	50,00	350,00	
	6	121,67	61,46	70,00	200,00	
	14	216,43	129,53	50,00	500,00	
	91*	122,09	84,66	0,00	500,00	

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		BGN	BGN	BGN	BGN
	26	125,77	81,10	0,00	400,00
	32	122,19	80,79	20,00	350,00
	23	110,87	70,38	40,00	300,00
	7	167,14	153,48	50,00	500,00
	2	80,00	42,42	50,00	110,00
	90*	122,89	84,79	0,00	500,00

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(Mann-Whitney U = 511,00; P = 0,01).

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ЭМОЦИОНАЛЬНО-АФФЕКТИВНЫЕ РАССТРОЙСТВА У ЖЕНЩИН, ОБРАЩАЮЩИХСЯ НА УВЕЛИЧИВАЮЩУЮ МАММОПЛАСТИКУ

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SUMMARY

The aim - to examine the prevalence, nature and structure of emotional and affective disorders in women seeking to augmentation mammoplasty.

Material and Methods: A total of 170 women seeking to augmentation mammoplasty, aged 20 to 47 years, clinical methods (clinico-psychopathological and clinical and anamnestic) before surgery, at 1, 3, 6 and 12 months.

Conclusions: The analysis of a relatively persistent emotional and affective disorders in women with augmentation mammoplasty revealed their fairly widespread and clinical polymorphism as a phenomenological manifestations and severity of symptoms.

Tags: Augmentation mammoplasty, emotional and affective disorders, depressive symptoms, adjustment disorder.

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ИНСУЛЬТЫ И ЭКСТРАПИРАМИДНЫЕ РАССТРОЙСТВА

ABSTRACT

Post stroke extrapyramidal disorders have been reported in a group of patients with ischaemic and haemorrhagic strokes. We reviewed series patients with extrapyramidal movements disorders following different types of strokes. In our series post stroke extrapyramidal syndromes (hemichorea, hemiballism, parkinsonism, etc.) present acutely or as a delayed consequence. Our finding shows possibilities of developing both hyperkinetic or hypokinetic extrapyramidal disorders as a clinical consequence of stroke.

Key words: stroke, extrapyramidal disorders, chorea, hemiballism, parkinsonism

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MMSE, TWSTRS (Toronto Western Spasmodic Torticollis Rating Scale).

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Gerasymchuk M.R.[1], Klishch I.P.[2], Varnava N.Ya.[3]

PLACE OF ENDOGENOUS INTOXICATION AT AN EARLY STAGE OF DEVELOPMENT OF TH CRITICAL STATES OF VARIOUS ETIOLOGIES

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[2]M.D., Assistant of Professor, Department of Pathological Physiology,

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Ivano-Frankivsk, Ukraine

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SUMMARY

Purpose of the study was to establish the place of endogenous intoxication at the early stages of the critical states of various etiologies.

The study was carried out on 164 Wistar white male rats (180 230 g), which were modeled critical states (CS) such as: acute diffuse peritonitis (ADP), acute intestinal obstruction (AIO), acute renal failure (ARF) and hypothyroidism (HP). In the blood of animals after 12 and 24 h was and in rats with HP after 1 month determined the average of middle molecular weight peptides (MMWP), the level of lactate (LT), leukocyte intoxication index (LII), nuclear index of the degree of endotoxemia (NIDE).

It was established that the development of polyetiological CS accompanied by increased markers of EI in the early stages. The most pronounced indicators of EI appeared LT and LII due to high growth immediately during the first 12 hours. The highest level of MMWP was in ARF that concerning about abuse of detoxification function. This reaction shows the inability of endogenous metabolic and cellular defense mechanisms and requires finding effective ways to increase the activity of protective systems.

Keywords: endogenous intoxication, critical states, experiment, peritonitis, acute intestinal obstruction, acute renal failure, hypothyroidism.

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In medical practice every physician, regardless of specialty, have to meet with polyetiological critical states (CS), among them the most common are acute diffuse peritonitis (ADP), acute intestinal obstruction (AIO), acute renal failure (ARF), acute pancreatitis, hypothyroidism (HP) and others. Over the years, the CS remain an urgent problem of urgent surgery and reanimatology, due to high mortality rates. Thus, mortality in ADP is 20 92,8%, which has a direct dependence on the number of affected organs involved in the disease process [8]. Mortality rate in conditions of AIO according to different etiology is 15 50%, and the ARF 15,6 62,8%, whereas in combination with sepsis is over 75% and has no noticeable downward trend [1]. HP accompanied by hormonal homeostasis, decreased motor activity, increase body mass and, consequently, changes in quality of life.

In the base of the pathogenesis of CS is necessary to pay attention to their complication such as syndrome of endogenous intoxication (EI). Impaired function of major disintoxication organs such as kidneys, liver and lungs, which can be both a cause and consequence of endotoxemia. Further activated immunocompetent cells, accompanied by the release of huge amount of inflammatory mediators [4]. All this favour to the increase permeability of the walls of the microcirculatory riverbed of the organs mentioned above. Simultaneous activation of proteolytic systems, storage of biologically active substances and toxic matters leads to further enhance of secretion of similar materials and accelerating the development of decompensation with generalization of EI syndrome.

The aim of the study was to determine the main markers of endogenous intoxication in conditions of polyetiological critical states.

Materials and methods. The study was carried out on 164 Wistar white male rats (180 230 g) divided randomly into 7 groups: I intact group of animals; II control (intraperitoneal injection of sterile 0,9% NaCl, 1 ml per 100 g of rat) to compare indices of IV and VI groups; III control (laparotomy was performed, exteriorized the intestines, then set it and sewed up the abdominal wall) to compare with results of V group; IV experimental, with reproduced ADP (induced by intraperitoneal injection of 10% suspension of feces, 1 ml per 100 g of rat intraperitoneal); V experimental reproduced AIO (ligatured of sigmoid colon); VI with experimental ARF (intramuscularly injected of 50% aqueous glycerol at a dose of 10 ml/kg) and VII experimental hypothyroidism using merkazolil (1-methyl-2-mercapto-imidazole), within 30 days. All tests were performed under general anesthesia using ketamine (40 mg/kg).

Blood sampling for studies in animals was obtained at 12 and 24 hours from the beginning of the simulation of the CS. We determined the average of middle molecular weight peptides (MMWP) at a wavelength of 254 nm MMWP1 (defined chain amino acids) and 280 nm MMWP2 (aromatic amino acids), and the level of lactate (LT), leukocyte index of intoxication by Kalf-Kalif (LII) and nuclear index of the degree of endotoxemia (NIDE).

Statistical analyses were performed with the non-parametric criteria using statistical software program "StatSoft/Statistica 7.0". Results were significant if the probability ratio was less than or equal to $p<0,05$, which is universally recognized in biomedical research.

Results and discussion. One of the prevailing components that characterize the course of intoxication and dismetabolic syndrome is the expression of endogenous intoxication process. We know that

many CS accompanied by the development of EI, which can be described as polyetiological and polypathogenetic syndrome caused by the accumulation in tissues and biological fluids endogenous toxic substances an excess products of normal or distortion of metabolism [5]. In our studies we found that the concentration of the primary markers of expression of the intoxication syndrome MMWP significantly increased in all experimental groups. Thus, in the IV group at 12 hours from the moment of modeling ADP, exceeding control levels of MMWP1 (254 nm) and MMWP2 (280 nm) to 32,84% and 33,2% ($p<0,01$); in the group V by 24,4% and 21,4% ($p<0,05$); in the VI by 36,7% and 43,9% ($p<0,01$) respectively. On 24 hour of experiment level of MMWP continued to increase and exceed indexes of control groups by: 38,6% and 41,7% ($p<0,01$) in the IV group; in V group by 31,6% and 33,4 % ($p<0,01$); in VI group by 43,8% and 45,8% ($p<0,01$); in VII group with experimental HP by 19,4% and 23,8% ($p<0,05$) respectively.

The main component of fraction MMWP is middle molecular peptides. The breakdown of the protein molecules, in result of which they are formed, occurs by the action of proteases. Since the level of MMWP depends on the one hand from the intensity of biopolymers breakdown, and on the other on the rate of it excretion through the organs of detoxification, we can think of a violation of both components of this process. This statement explains the maximum increase in MMWP rate in animals with ARF model. Thus, the data confirm the dependence of the level of EI on the duration of the pathological process and coincide with the typical dynamics in relation to other pathological conditions [7].

It is obvious that the CS decreases cell perfusion through the microcirculation disorder, sensitive marker of which is a plasma lactate [6]. It should be noted that more than three-fold increase in the concentration of LT at 12 h of investigations in groups IV and VI, and in V 1,2 times. This confirms that cell perfusion violations and consequently indicates hypoxic conditions, resulting in an inadequate oxygen supply of the tissues. It should be noted that, according to Daniel De Backer and colleagues LT produced by many organs, such as skin, muscle, red blood cells and white blood cells, and lungs, although to a lesser quantity, but during hypoxia, CS (sepsis, ADP, AIO, ARF, HP) due to endotoxin stimulation, resulting in the inhibition of pyruvate dehydrogenase and its production increases significantly [5].

With the continuation of the duration of the experiment level of LT increases, exceeding the results of the control at 24 h in animals with ADP by 7,8 times; with AIO - twice, and with ARF 6,8 times. Blood LT content grew in the VII group also and exceeded control by 6,2 times in the end of 1 month of experiment. This reaction can also indicate the involvement and increased use of white blood cells in response nonspecific cellular level of immune protection, and their retention in the tissues of the main organs of detoxification, resulting in hyperactivation and sequestration, and subsequent destruction of their structural components of the overall progression of destructive phenomena.

To confirm the assumption of an active role of leukocytes in the EI process, in consideration of received results, we decided to evaluate the response of white blood cells in the development of ADP, AIO and ARF in rats. On this purpose we determined the leukocyte index of intoxication by Kalf- Kalif (1963) and the nuclear index of the degree of endotoxemia.

On the 12 h of the experiment were recorded such changes: in IV group LII increased by 4,3 times ($p<0,01$), but NIDE, contrariwise was diametrically inverse tendency to downward ($p>0,05$); in the animals of V group LII has increased by 2,3 times ($p<0,05$), and NIDE change towards growth; in rats with acute renal failure observed progression of LII and excess of normal rates by 3,9 times ($p<0,01$), while NIDE only by 1,2 times.

After another 12 hours of research EI values for leukocytes continued to grow. Thus, at 24 h LII experiment in animals with ADP significantly increased by 8,1 times; with AIO in 5,1 times, and with ARF in 8,0 times. In this time NIDE also slowly began to grow: in the IV group 2,4 times, in V 1,5 times, while VI 2,5 times. After a month of the experiment in group VII of rats LII exceeded the intact animals by 1,7 times and NIDE 1,4 times. This indicates excessive involvement of leukocytes, including neutrophilic granulocytes in the inflammatory process, their great loss, that is why they are called "kamikadze" of acute inflammation, contributing to the parallel growth of EI [2, 10]. And as a result of depreciation loss, hyperproduction of immature forms that are characteristic for the acute inflammatory response, potentiation of the CS of the body, as a result of the elevation of cytokines production (granulocyte colony-stimulating growth factor etc.) in the exposition to chemotactic factors such as endotoxins, components of complement, interleukins, lysosomal enzymes, etc. [3, 7]. Similar factors have

a stimulatory effect on the monocytic sprout, affecting mainly to enhance the functional activity of macrophages in tissues [8].

Evaluating the results of the study, we can conclude that there are CS, such as ADP, AIO, ARF and hypothyroidism enhancing EI due to the intensification of the processes of formation MMWP and lactate [9, 10]. Resulting in excessive accumulation of MMWP and LT in the body due to the inability of their rapid elimination and excretion.

Conclusions. In the result of the research was found that the development of critical states of an organism resulting from various etiologies, accompanied by the development of endogenous intoxication. The main markers of EI at different CS values indexes of lactate and leukocyte index of intoxication by Kalf-Kalif due to high elevation immediately during the first 12 hours. Significant increase in LII, particularly in ADP and ARF can be explained by the active work of phagocytic immunity with further progression dysfunctional changes, as evidenced by the potentiation of LT and MMWP and slow the growth of NIDE during extending the experiment. This reaction shows the inability of endogenous metabolic and cellular defense mechanisms and requires finding effective ways to increase the activity of protective systems.

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ОСОБЕННОСТИ ФОРМИРОВАНИЯ ЗАБОЛЕВАНИЙ СЕРДЕЧНО-СОСУДИСТОЙ СИСТЕМЫ У РАБОТНИКОВ НЕФТЕХИМИЧЕСКИХ ПРОИЗВОДСТВ

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RESUME

Relevance. Given the high social significance of cardiovascular diseases among working-age population, it is important to study the impact of production and non-risk factors on the prevalence of cardiovascular diseases [1].

The Aim. Assessing the impact of risk factors for the development of cardiovascular diseases among workers of petrochemical plantsMethod. Standard methods surveyed employees of a number of petrochemical industries

The Result. The combined effects of production and non-risk factors creates a higher level of cardiovascular risk scale SCORE

Conclusions. It is necessary to develop and implement a set of preventive measures to reduce the risk of cardiovascular diseases among workers of petrochemical plants in the corporate and individual levels

KEYWORDS: cardiovascular disease, cardiovascular risk factors, petrochemical production.

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МОРФОМЕТРИЧЕСКИЕ ПОКАЗАТЕЛИ ПОДЖЕЛУДОЧНОЙ ЖЕЛЕЗЫ И ОКРУЖАЮЩЕЙ КЛЕТЧАТКИ ПРИ ОСТРОМ ДЕСТРУКТИВНОМ ПАНКРЕАТИТЕ

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Resume:

The article is present results of morphometric research of pancreas and adjacent tissues in 31 patients died from complications of acute destructive pancreatitis. As a result of the carried-out analysis removed reliable changes of morphometric indicators. The last is in complex examination confirms expressiveness of changes in the specified organs in acute pancreatitis.

Key words: pancreas, morphometric indicator, acute pancreatitis.

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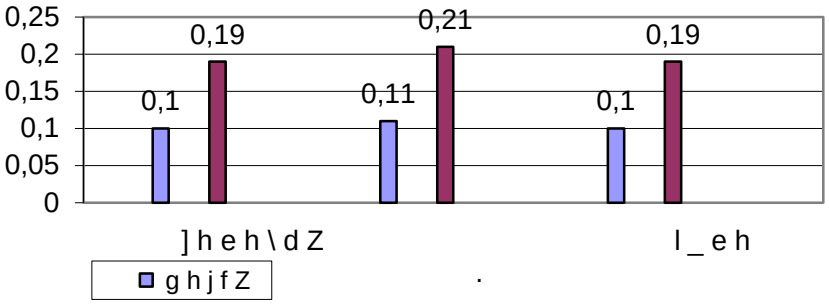
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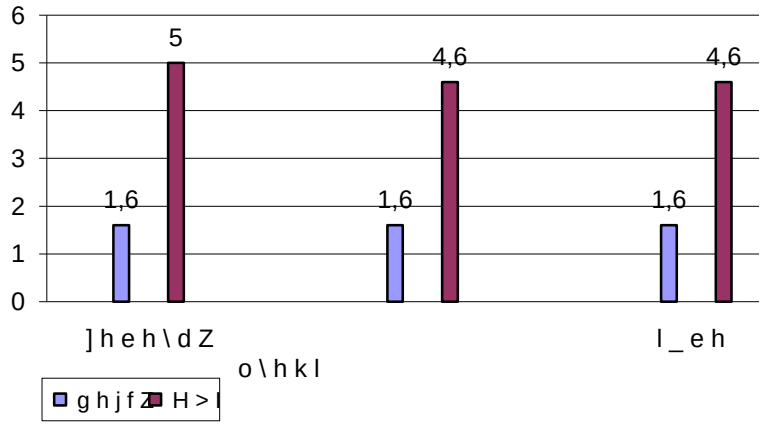
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ОСОБЕННОСТИ ЛОКАЛЬНОГО ИММУНИТЕТА ПРИ ОСТРОМ ЭКССУДАТИВНОМ ОТИТЕ

,

THE FEATURES OF LOCAL IMMUNITY IN ACUTE EXUDATIVE OTITIS

Kalmatov R.K.

SUMMARY

Presented analyze of literary facts on immunological indexes of the middle-ear exudate on otitis. It was disposed that development of pathologic process in the mucous membrane of the upper respiratory tract and middle-ear connected with the violation of mucociliary transport and changed local immune status.

Key words: otitis, exudate, middle-ear.

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ОЦЕНКА ВЛИЯНИЯ РЕЖИМА СНА НА САМОЧУВСТВИЕ СТАРШЕКЛАССНИКОВ ПРОМЫШЛЕННОГО ГОРОДА

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ASSESSMENT OF THE INFLUENCE OF THE VITAL ACTIVITIES OF THE DREAM ON FEELING AT THE HIGH SCHOOLCHILDREN OF INDUSTRIAL CITY

S.V. Kapranov, Y. S. Kapranova

SUMMARY

ldren.

It was investigated the influence of the neuropsychological conditions vital activities on feeling at the high scoolchildren of city with the large ferrous and coke-chemical industry.

Materials and methods. With the purpose of study of the complaints in 646 schoolchildren of 9-11 classes (15-17 years) of 10 comprehensive schools are carried out questionnaire.

polyphasic sleep. Violation of terms of bedtime and normal duration of sleep high scoolchildren accompanied by a deterioration of their state of health and the use of polyphasic sleep, which should be regarded as a compensatory response of the organism to lack of sleep.

Suggested that education of the younger generation of healthy lifestyles, providing a rational mode of life, including work and leisure, including physiologically optimal time bedtime (to 23.00) and the duration of sleep (9 hours).

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	23.00-1.00			< 0,02

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	9-10			< 0,05
	5-7			< 0,05
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	9-10			> 0,05
	5-7			< 0,02
	8			> 0,05
	9-10			> 0,05

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СРАВНИТЕЛЬНАЯ ОЦЕНКА ВОЗМОЖНОСТЕЙ ЛУЧЕВЫХ МЕТОДОВ ДИАГНОСТИКИ ГЕМАНГИОМ ПОЗВОНОЧНИКА

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ABSTRACT

The article presents a comparative evaluation of radiation diagnostic methods of spinal hemangiomas, diagnostic features of each method and their comparative characteristics. We studied the x-ray results, computer tomography and magnetic resonance examinations of 90 patients of the neurological Department of the Clinical hospital named S. R. Mirotvortsev of Saratov state medical Universaty with a diagnosis of "spinal hemangioma".

Key words: spinal hemangioma, x-ray, computer tomography, magnetic resonance imaging.

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287-295.
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ИССЛЕДОВАНИЕ ФАРМАКОЛОГИЧЕСКИХ ЭФФЕКТОВ ФИТОСБОРОВ «ЗОЛОТИСТЫЙ» И «АРОМАТНЫЙ»

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PHARMACOLOGICAL EFFECTS COMPARATIVE STUDY OF PLANT COLLECTIONS

Bashkatov S.A., Farkhutdinov R.G., 1Gilmutdinova L.T., 1Marakaeva E.A.
Bashkir State University, Ufa, Russia (450076, Ufa, ul. Validi Zaki, 32)
Bashkir State Medical University, Ufa, Russia (450001, Ufa, Lenina, 3)

ABSTRACT

A comparative preclinical study of the pharmacological properties of plant collections "Aromatny", "Zolotisty", recommended for the treatment of diseases of the liver and biliary tract. Found that both the collection have analgesic effect, and the pharmacological activity of collecting "Zolotisty" is comparable with the effect of analgin preparation. Antipyretic effect collection "Aromatny" is comparable to the early hours of the pharmacological effects of the drug - aspirin. In this collection of "Aromatny", having a mild antipyretic effect, prevented the development of pyrogenic reactions and reduces body temperature below the normal range. Collection "Zolotisty" also showed anti-inflammatory activity, is about 50% of the antiphlogistic action of the drug comparison ortofen. In the model of toxic hepatitis, use plant collections "Aromatny" and "Zolotisty" mitigates the increased values of enzymes reflect the functional state of the liver and heart. Treatment of taxes "Aromatny" and "Zolotisty" reduces the severity of thymol. Fees "Aromatny" and "Zolotisty" in the model experiments showed hepatoprotective activity and membrane.

Keywords: plant collections, to clinical trials, herbal medicine, diseases of the liver and bile passages diseases.

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	4,7±0,2	23,67±1,7*
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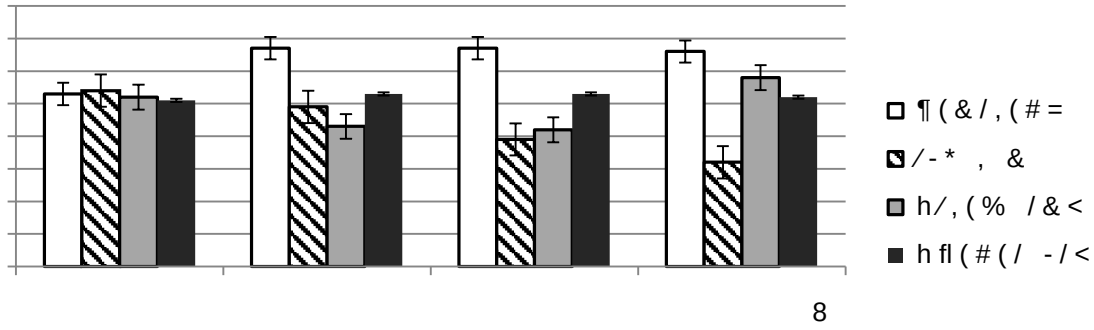

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	49,4±6,1	46,7±5,5
	47,5±6,6	36,6±4,8*
	24,3±0,9*	23,7±1,0*
	53,8±3,7	51,7±3,9

	0,25±0,04*	0,38±0,02*	2,09±0,01*
	2,47±0,27*	1,66±0,36*	4,72±0,42*
	2,53±0,24*	1,82±0,32*	7,62±0,61*
	0,99±0,22*	0,78±0,4*	3,62±0,47*
	3,62±0,29	3,67±0,35	13,98±0,19

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	67,9±4,7	38,3±3,0	
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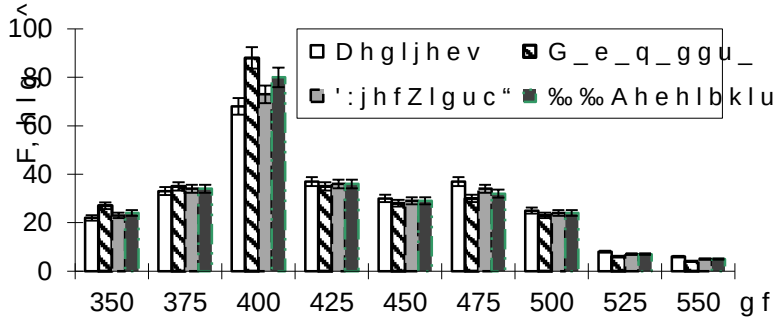

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ВЛИЯНИЕ ОРГАНИЧЕСКИХ ПРИМЕСЕЙ АРТЕЗИАНСКОЙ ВОДЫ НА ЭЛИМИНАЦИЮ СВИНЦА ИЗ КРОВИ ДЕТЕЙ, В ПРОЦЕССЕ ПРОВЕДЕНИЯ МЕДИЦИНСКОЙ РЕАБИЛИТАЦИИ

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Resume:

The problem is most acute lead intoxication for children of the Urals region. Natural organic impurities in drinking water can reduce blood lead levels in children.

CONCLUSION

Model system on the base of lead oxalate can be used for evaluation of properties of natural organic impurities.

When used artesian drinking water significantly increases the level of calcium in the blood of children.

As used in the treatment artesian drinking water can reduce blood lead levels in children.

The Keywords: lead, water, organic impurities.

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4		0.5	187	41	3	
5		0.5	220	31	0.7	1.9
6		0.5	288	9.7	3	0.4

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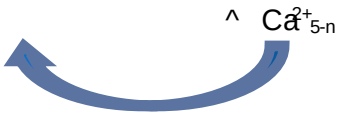

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ОСОБЕННОСТИ ЭПИДЕМИЧЕСКОГО ПРОЦЕССА КОКЛЮША В КЫРГЫЗСКОЙ РЕСПУБЛИКЕ

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FEATURES OF WHOOPING COUGH EPIDEMIC PROCESS IN THE KYRGYZ REPUBLIC

M.S.Niyazalieva[1], V.S.Toygombaeva[2]
Kyrgyz State Medical Academy named after I.K. Ahunbaev[1]
Kyrgyz-Russian Slavic University named after B.N. Eltsin[2]
Bishkek, Kyrgyz Republic

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SUMMARY

The article presents the analysis of the changes and features of the whooping cough epidemic process since pre-vaccination period to the present in the Kyrgyz Republic. The age features of morbidity pertussis infection.

Key words: whooping cough, epidemic process, morbidity

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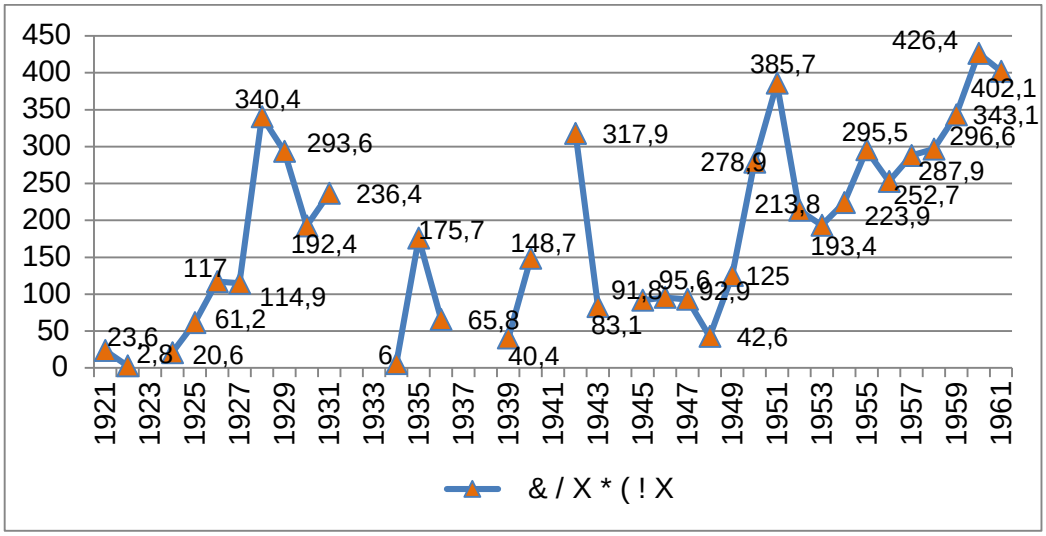

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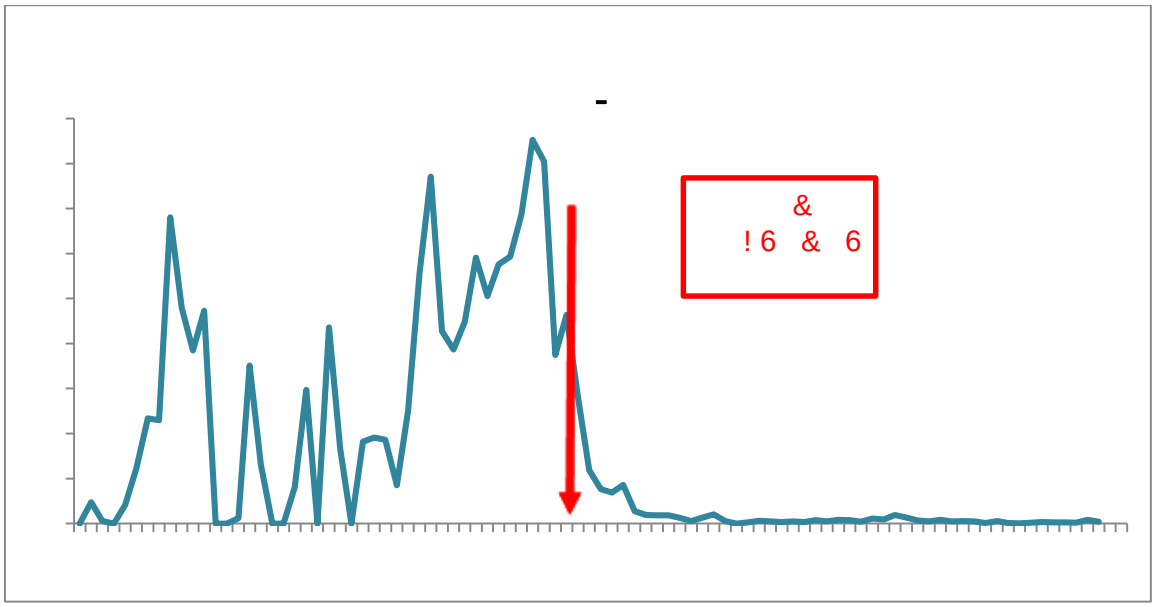

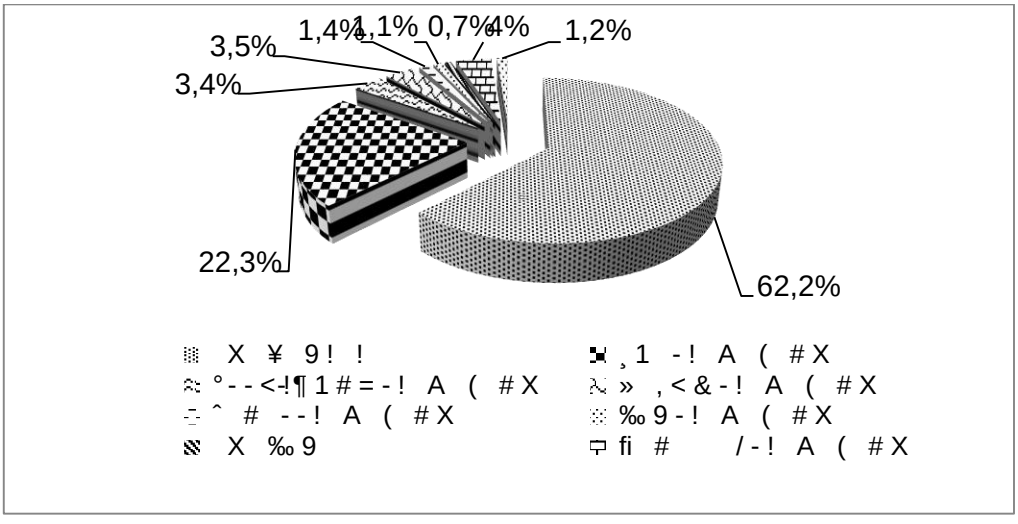

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2.		49	67	t1t2= - 2,5
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ОБОСНОВАНИЕ ПРИМЕНЕНИЯ PHALLUS IMPUDICUS В БИОТЕХНОЛОГИИ

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SUMMARY

The article presents data about current trends in biotechnology development. In particular, biotechnology basidiomycete Phallus impudicus. Describes the basic medical biological properties of the active substances Phallus impudicus. The classification of polyfunctional polysaccharides and their biological activity: anti-tumor, immunological, adaptogenic and sorption. Given the promising areas of medical data use of biologically active substances.

Keywords: Biotechnology, polysaccharides, Phallus impudicus, basidiomycete, cultivation

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basidiomycetes mushrooms. // Int J. Med Mushr. 1999. Vol. 1. N 2.P. 351-370

Phallus impudicus

АНАЛИЗ МОРФОМЕТРИЧЕСКИХ ПОКАЗАТЕЛЕЙ ПАРЕНХИМЫ ЛЁГКИХ КРЫС ПРИ ПАРЕНТЕРАЛЬНОМ ВВЕДЕНИИ КСЕНОГЕННОЙ ЦЕРЕБРОСПИНАЛЬНОЙ ЖИДКОСТИ

SUMMARY

DV Shatov, PE Grigoriev

Analysis of morphometric characteristics of the parenchyma of the rat's lungs under parenteral introduction of xenogenic cerebrospinal fluid.

(Simferopol)

Objective. To study the influence of controlled factors (impact factor in the control and experimental group, age of the animal, duration of the experiment and their reciprocal action) over the resultant morphometric characteristics of the rat's lung parenchyma.

Methods. The study was performed on 60 Wistar rats of both sexes, divided into two groups. The experimental group was getting XCSF 3 times (for 7 days long experiment) or 10 times (for 30 or 90 days long experiment) with 2-day intervals. The control group was getting 0,9% solution of sodium chloride. During the microscopic examination, we estimated the percentage of the areas with intact parenchyma, emphysema, dystelektases and hemorrhages under the influence of the controlled factors (like the exposure to the XCSF, the age of the animals and duration of the experiment).

Conclusion. During 30-day experiment, the most influential for all morphometric characteristics is the controlled age factor, while the controlled impact factor and their reciprocal action are more influential for percentage of intact parenchyma and emphysematous areas. At aged animals, the controlled impact factor is most influential for percentage of hemorrhagic and intact areas, while the controlled factor of duration and their interaction are most influential for all studied characteristics of the lung's parenchyma. Taking into consideration these results, the usage of aged rats and 30-day experiment will be most optimal for studying the influence of XCSF over the lung's parenchyma after exposure to disturbing factors.

Key words. parenchyma of lungs, morphometry, cerebrospinal fluid, correction.

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	51,29	95,27	53,47
	44,53	93,96	52,17
	29,02	94,79	2,76*
	5,98*	97,05	92,67

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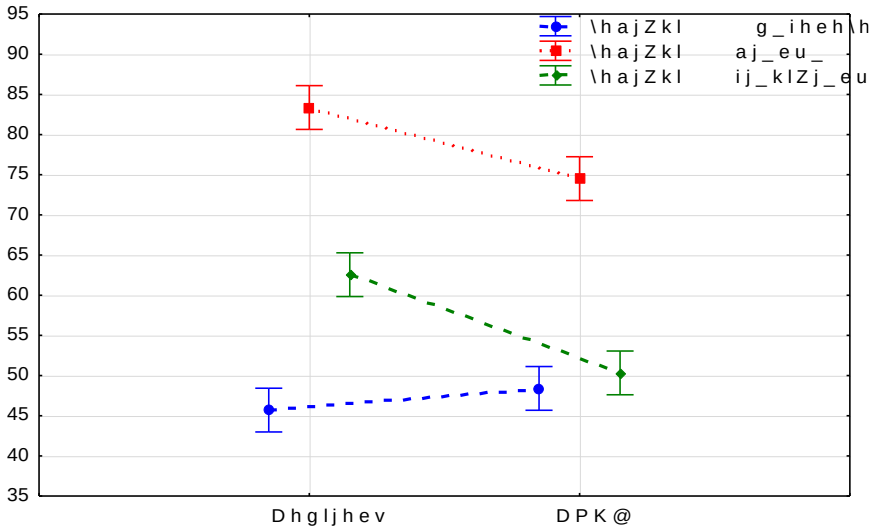

	71,49	94,67	91,91
	53,07	76,33	87,61
	8,04*	96,56	94,99
	95,95	96,73	96,04

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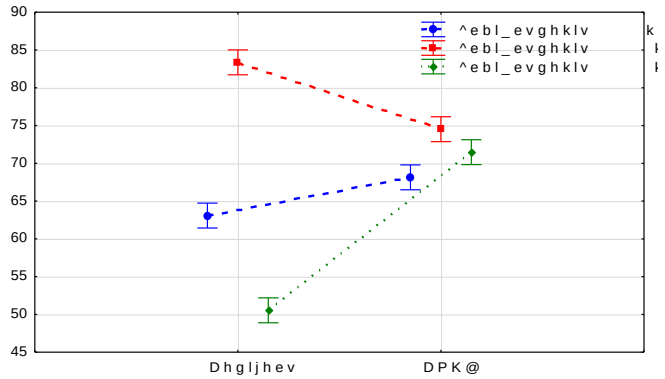

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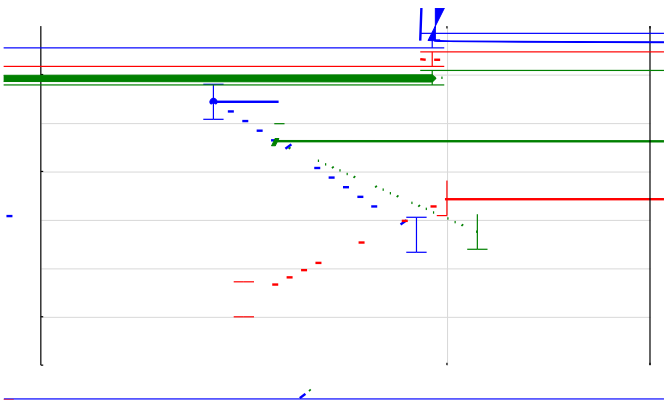

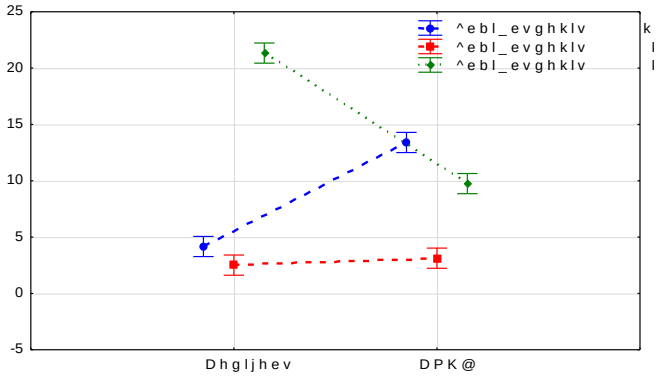
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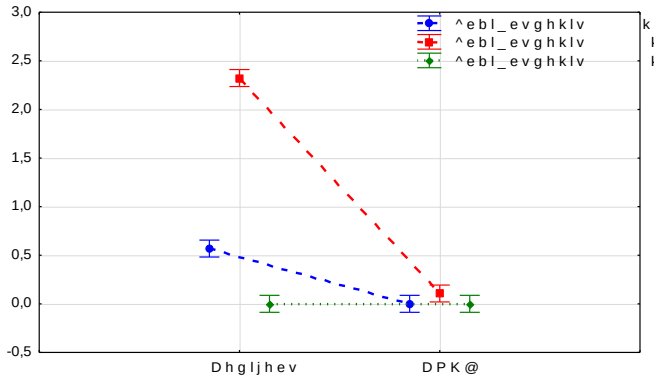
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ПОСТМОРТАЛЬНАЯ ХАРАКТЕРИСТИКА СОКРАТИТЕЛЬНОЙ СПОСОБНОСТИ ЛЕВОГО ЖЕЛУДОЧКА

Contractile activity of the myocardium of the left in the terminal period of dependence of the dynamic process. Stable preserved functional capacity in patients with a small amount of free liquid and a small left myocardial hypertrophy.

Keywords: terminal period, the left myocardium.

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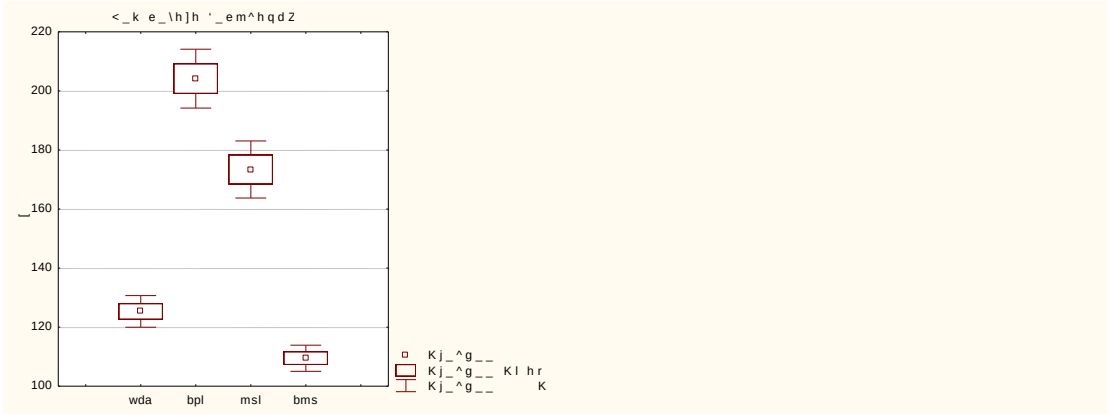
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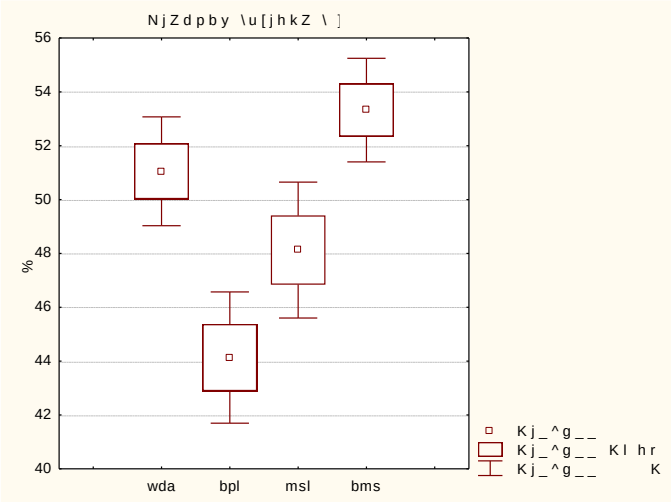
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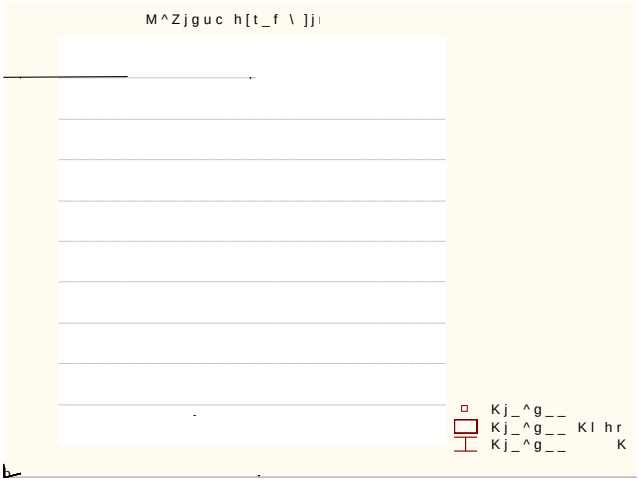
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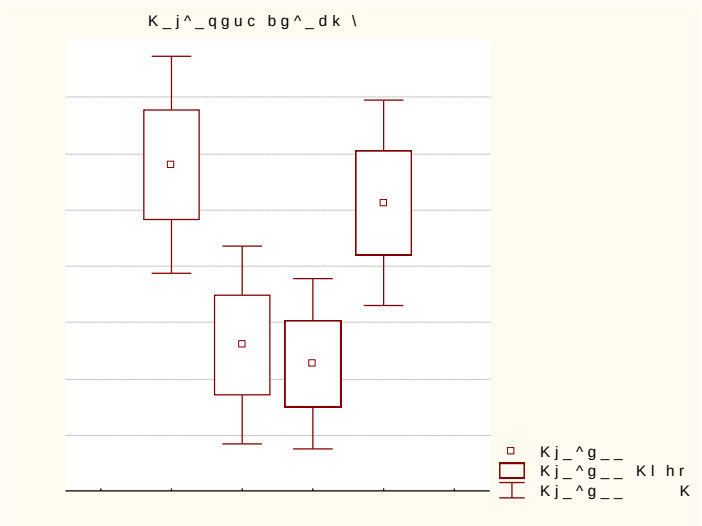

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ЭВОЛЮЦИЯ МЕТОДИЧЕСКИХ ПОДХОДОВ К ИДЕНТИФИКАЦИИ РЕПРОДУКТИВНОЙ ТОКСИЧНОСТИ ХИМИЧЕСКИХ СОЕДИНЕНИЙ

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RESUME

There are methodological approaches to investigation of reproductive toxicity of pesticides and other food contaminants analyzed in detail, critically evaluated and compared in the article. With this purpose two test-system were used: gonadotoxicity test-system and two-generation reproduction study. Basing on the analysis of the results of large-scale expert-analytical researches high sensitivity and reliability of the gonadotoxicity test-system has been shown.

Key words: methodological approaches, reproductive toxicity, pesticides, food contaminants.

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Draft Guidance

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2. Friedman L., Kunin C. M., Nelson N., Whittenberger J. L., Wilson, J. G. Food and Drug Administration. Advisory Committee on Protocols for Safety Evaluations: Panel on Reproduction Report on Reproduction Studies in the Safety Evaluation of Food Additives and Pesticide Residues // Toxicol. and Appl. Pharmacol. 1970. Vol.16, . P. 264-296.
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6. Procedures for the testing of intentional food additives to establish their safety for use: second report of the Joint FAO/WHO Expert Committee of Food Additives. WHO, 1958.

WHO Technical Report Serie

19 p.

ВЗАИМОСВЯЗЬ ФУНКЦИОНАЛЬНЫХ ЗАБОЛЕВАНИЙ ЖЕЛУДОЧНО-КИШЕЧНОГО ТРАКТА С ПОГРАНИЧНЫМИ ПСИХИЧЕСКИМИ РАССТРОЙСТВАМИ

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SUMMARY

Conducted a sufficiently large number of studies confirming the relationship between functional disorders of the gastrointestinal tract and impaired emotional status among adults, while in children this issue is not developed enough. This is reflected in the insufficient effect of the therapy aimed only address the symptoms and morphological changes in the gastrointestinal tract. In this regard, the aim of our study was to determine the relationship between functional diseases of the gastrointestinal tract (FD GIT) and borderline mental disorders (BMD) in children. We examined 1179 students of Krasnoyarsk aged 12-17 years. Diagnosis FD GIT exhibited on the basis of the survey among schoolchildren according to Questionnaire on Pediatric Gastrointestinal Symptoms, Rome III Version (QPGS-RIII). The 186 children were evaluated outage probability using computerized testing the original questionnaire "The Development and Well-Being Assessment (DAWBA, R. Goodman et al.). As a result, a link was established between FD GIT and various types of BMD, in particular anxiety and depression. With most of the outage probability was observed in children with functional dyspepsia, that may associated with the greatest deterioration in the quality of life. Thus, we can assume that in the initial stages of FD GIT are a consequence or even a manifestation of BMD (as in the case of somatization depression), and further exacerbate their course, then there is a vicious circle. Therefore, in our opinion, all children with complaints of gastrointestinal tract disorders, it is necessary to test emotional state (regardless of the morphological diagnosis), the results of which to correct therapy, using a variety of psychotherapeutic techniques and drugs.

Keywords: children, functional diseases of the gastrointestinal tract, borderline mental disorders.

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Pediatric Gastrointestinal Symptoms, Rome III Version (QPGS-

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	(n=877)	(n=8)	(n=43)	(n=14)	(n=15)	(n=11)	
(DSM)	0,69 (0,54-0,83)	9,25 (3,17-15,3)	2,56 (1,28-3,84)	8,21 (3,36-13,06)	3,60 (2,05-5,15)	2,73 (0,90-4,56)	-1<0,001 -2=0,002 -3=0,019 -4<0,001 -5=0,109 -2=0,018 -5=0,093
	0,09 (0,03-0,15)	1,88 (0,00-3,75)	0,35 (0,00-0,70)	3,57 (0,00-7,14)	0,00 (0,00-0,00)	4,55 (0,00-9,09)	-1<0,001 -2=0,054 -3<0,001 -5<0,001
	0,18 (0,10-0,27)	3,75 (1,30-6,20)	0,00 (0,00-0,00)	1,29 (0,21-2,36)	0,00 (0,00-0,00)	0,00 (0,00-0,00)	-1<0,001 -3<0,001 -2<0,001 -4=0,047 -5=0,088 -3=0,012
	0,29 (0,16-0,41)	1,88 (0,00-3,75)	0,70 (0,21-1,19)	0,00 (0,00-0,00)	0,00 (0,00-0,00)	0,00 (0,00-0,00)	-1<0,001 -2=0,003
	0,26 (0,17-0,35)	0,75 (0,26-1,24)	2,81 (1,16-4,46)	0,00 (0,00-0,00)	0,20 (0,00-0,40)	0,00 (0,00-0,00)	-1<0,001 -2<0,001 -3=0,055 -5=0,088
-	0,06 (0,03-0,09)	0,38 (0,00-0,75)	0,07 (0,00-0,14)	0,64 (0,30-0,98)	0,00 (0,00-0,00)	0,00 (0,00-0,00)	-1<0,001 -3<0,001 -3=0,016 -4=0,063 -5=0,109
	0,49 (0,36-0,62)	2,25 (0,39-4,11)	0,70 (0,33-1,07)	0,00 (0,00-0,00)	0,80 (0,45-1,15)	0,27 (0,00-0,55)	-1=0,004 -2=0,004 -4<0,001 -3=0,056 -4=0,041

	(n=877)	(n=8)	(n=43)	(n=14)	(n=15)	(n=11)	
(DSM)	1,18 (0,95-1,41)	3,75 (1,30-6,20)	3,02 (1,35-4,70)	3,57 (0,00-7,14)	2,00 (0,64-3,36)	9,09 (2,99-15,2)	-1=0,007 -2=0,135 -4=0,109 -5=0,026
	0,37 (0,28-0,47)	3,75 (2,07-5,43)	1,58 (0,42-2,74)	0,43 (0,14-0,72)	0,40 (0,13-0,67)	0,82 (0,40-1,24)	-2<0,001 -2=0,005 -5=0,003 -2<0,001 -3=0,005 -4=0,003 -5=0,034
	0,04 (0,03-0,06)	0,75 (0,26-1,24)	0,14 (0,04-0,24)	0,00 (0,00-0,00)	0,00 (0,00-0,00)	0,27 (0,00-0,55)	-1<0,001 -2=0,109 -5=0,044 -2=0,052 -3=0,055 -4=0,047

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Химические науки

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СВЕРХКРИТИЧЕСКАЯ ФЛЮИДНАЯ ЭКСТРАКЦИЯ ЛИПИДНО-ПИГМЕНТНОГО КОМПЛЕКСА АРКТИЧЕСКИХ БУРЫХ ВОДОРОСЛЕЙ

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Laminaria saccharina (Linnaeus) J.V.Lamouroux, Laminaria digitata (Hudson) J.V.Lamouroux, Fucus vesiculosus Linnaeus, Ascophyllum nodosum (Linnaeus) Le Jolis

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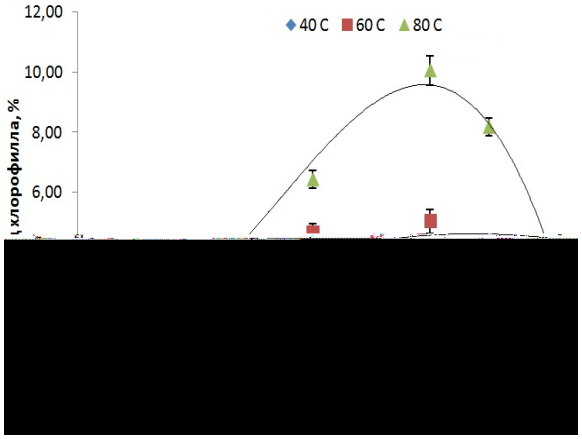

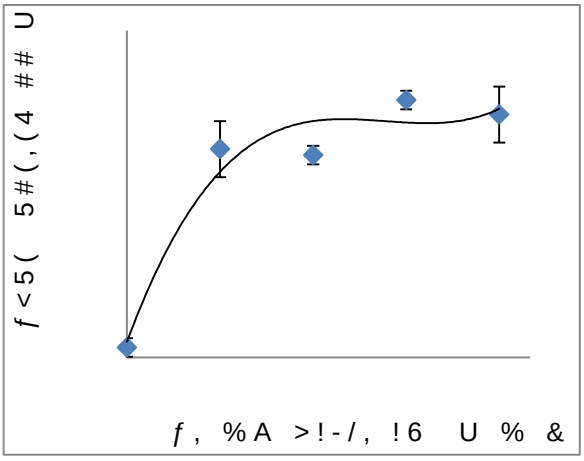

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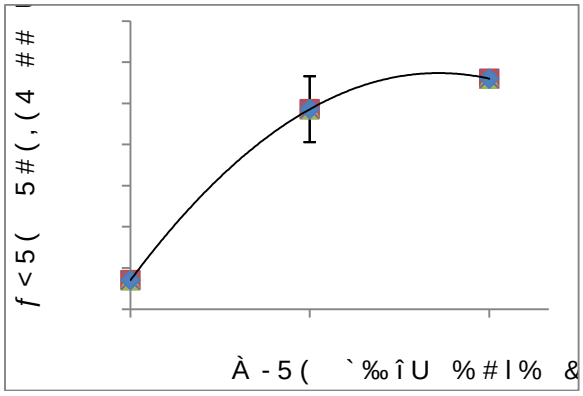

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l.digitata -

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	0,016	0,40	81,0	0,019
	0,01	0,29	42,2	0,0228
	0,01	0,26	0,2	5,6
	0,069	1,71	23	0,3
	3,3	85,71	15,8	20,9

	0,044	0,66	97,7	0,045
	0,004	0,058	26,0	0,0154
	0,001	0,13	0,05	8,6
	0,05	0,81	0,46	10,85
	0,3	4,84	3,5	6,23

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6. Chajes, V. Omega-6/Omega-3 polyunsaturated fatty acid ratio and cancer [Text] / V. Chajes, P. Bougnoux // W. Rev. Nutr. Diet. 2003. Vol. 92. P. 133-151.
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8. Isolation of two anti-inflammatory and one pro-inflammatory polyunsaturated fatty acids from the brown seaweed Undaria pinnatifida [Text] / M.N.A. Khan, J.-Y. Cho, M.-C. Lee. et al. // J. Agric. Food. Chem. 2007. Vol.55. P. 6984-6988.
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Science Technology International. 2002. Vol.8, N 5. P. 269 284.
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СРАВНИТЕЛЬНЫЙ АНАЛИЗ ПОРИСТОЙ СТРУКТУРЫ АЛЮМООКСИДНЫХ НОСИТЕЛЕЙ, ПОЛУЧЕННЫХ ПРИ ИСПОЛЬЗОВАНИИ ОРГАНИЧЕСКОГО АГЕНТА (ТЭГ)

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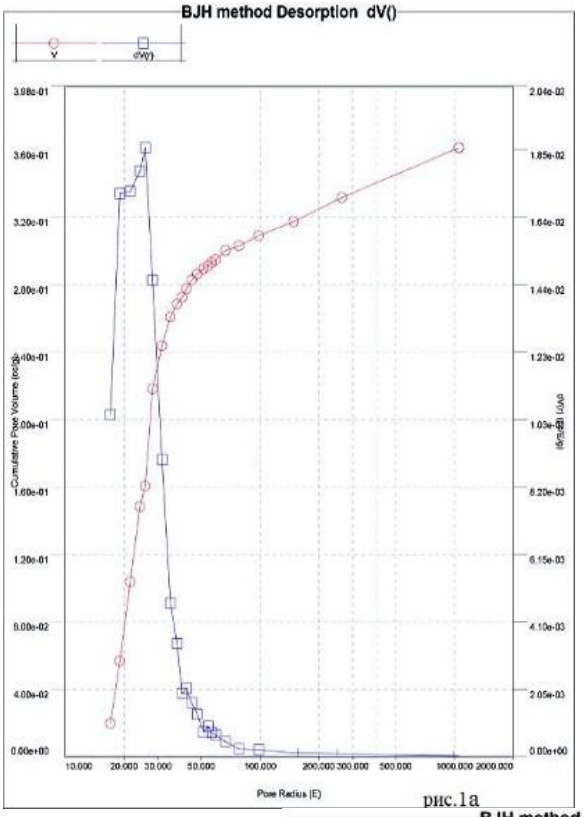

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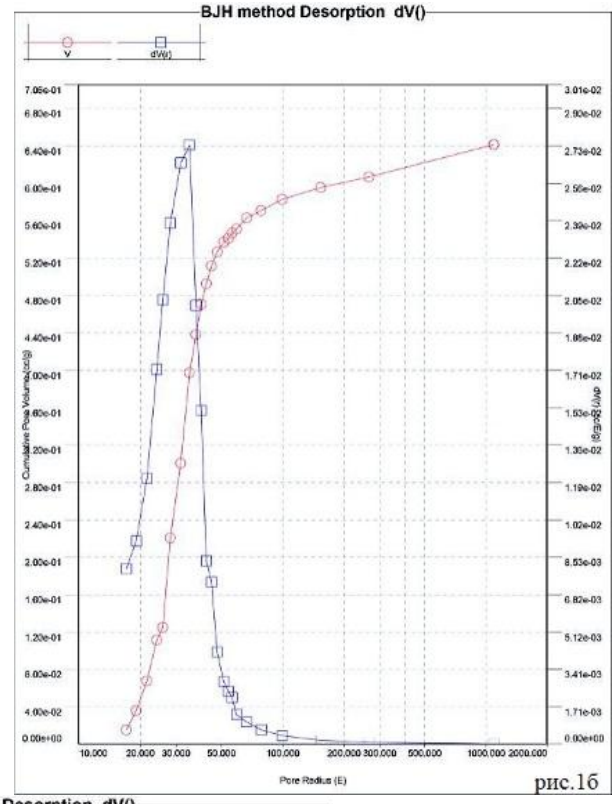

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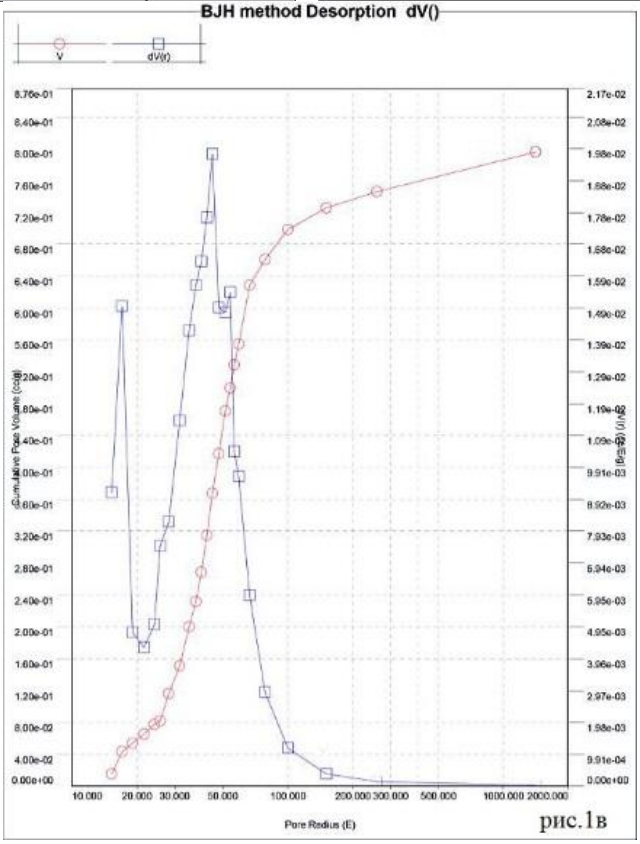

рис.1в

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I	0,361	240	25,739
II	0,642	430	32,762
III	0,796	350	44,863

1. http://www .pereplet.ru/ obrasowanie/stsoros/1070.html
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Ветеринарные науки

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ВЛИЯНИЕ АЭРОЗОЛЬНОГО ДЕЗИНФЕКТАНТА «АЛКОПЕРИТ» НА ОРГАНИЗМ ЖИВОТНЫХ

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In the course of the research revealed little irritating disinfectant "Alkapuri", when aerosol use of laboratory animals. Proven safety of the drug, when used in the recommended modes.

Keywords: disinfectant preparation, aerosol application, safety for animals

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ПРОТИВОМИКРОБНАЯ ЭФФЕКТИВНОСТЬ АЭРОЗОЛЬНОГО ДЕЗИНФЕКТАНТА "АЛКОПЕРИТ

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During the studies identified an effective dose of disinfectant drug "AlkoPerit" with aerosol use, and also shows the spectrum bactericidal and sporicidal activity against the major pathogens of infectious diseases of farm animals.

Keywords: disinfectants, aerosol application, antimicrobial effectiveness.

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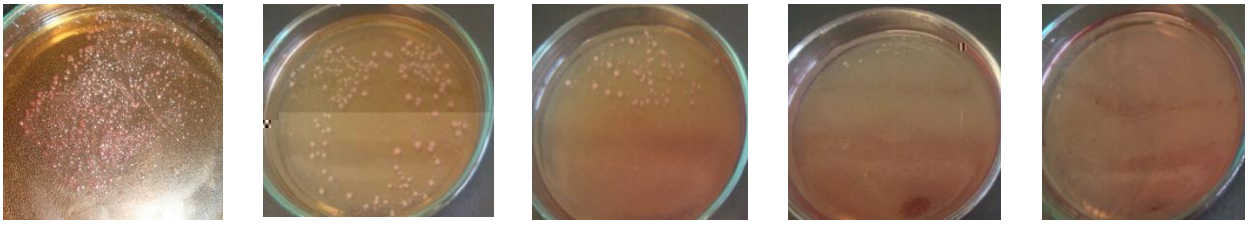

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Биологические науки

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КІЛЬКІСНА ТА ЯКІСНА ТРАНСФОРМАЦІЯ КАННАБІНОЇДНИХ СПОЛУК СОРТІВ КОНОПЕЛЬ CANNABIS SATIVA L

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QUALITATIVE AND QUANTITATIVE TRANSFORMATION OF CANNABINOID COMPOUNDS OF HEMP VARIETIES CANNABIS SATIVA L.

L. Horshkova, A. Bohdanova, Oleksandr Dovzhenko Hlukhiv national pedagogical university, Ukraine

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SUMMARY

The results of the analytical work prove that certain cannabinoid compounds are labile and their quantitative and qualitative transforming was occurring under the influence of high temperature. Cannabidiolic acid is the most labile substance and it was it was transformed under the influence of considerably not very high temperature, first of all, into cannabidiol; with growing the exposure of heating at the same temperature increasing the tetrahydrocannabinol occurred, but with raising the temperaturemore considerable forming cannabinol was realized. The effect of high temperature of 150-200 degrees Centigrade led to absolute absence of cannabidiolic acid ant to considerable decreasing the amount of cannabidiol, tetrahydrocannabinol and cannabinol.

We consider it necessary to stress that applying the method of thin layer chromatography is more efficient for the definition of transforming cannabinoid compounds as compared to gas-liquid chromatography.

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[6, 7], Bicher and Mechoulam

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Silufol VW 254R [1; 2].

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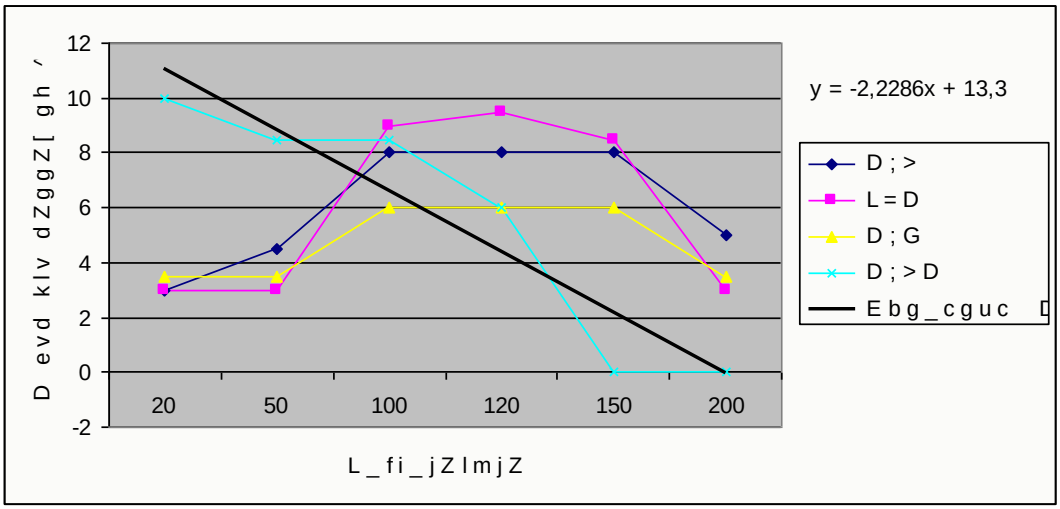
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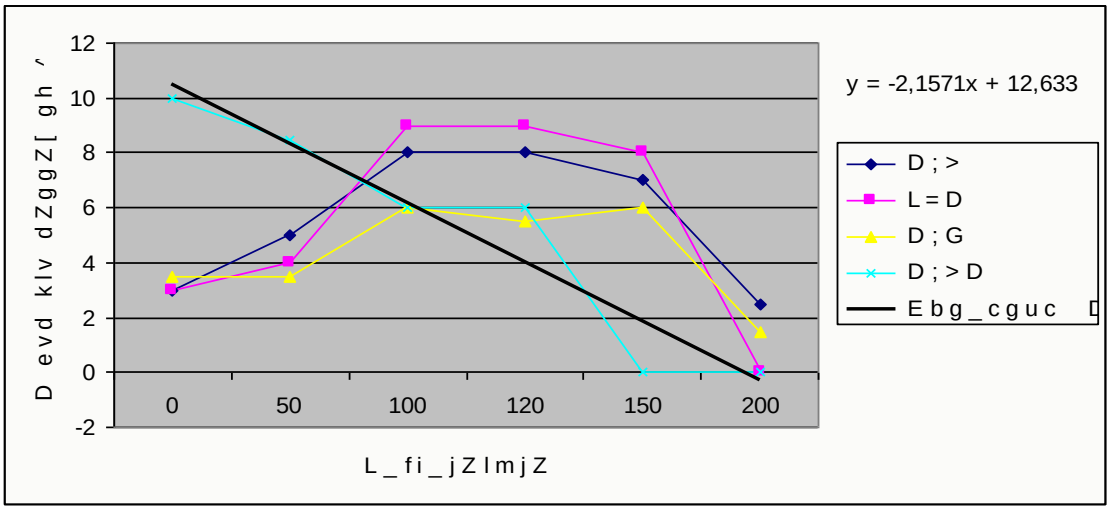
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ЭКОЛОГО-ГИГИЕНИЧЕСКАЯ ОЦЕНКА ДЕЙСТВУЮЩИХ ПРОИЗВОДСТВ ЭТИЛБЕНЗОЛА-СТИРОЛА

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SUMMARY

It was determined the levels of emissions and discharges of chemicals into the environment from light-duty and large-scale production of ethylbenzene, styrene, a part of Russia's largest petrochemical associations. It is shown that small-scale production of ethylbenzene - styrene pose a risk of environmental pollution. It was established that the architectural-planning decisions related to the removal of all process equipment for outdoor installation, the application of modern technology and equipment for leaks in the bulk manufacture of reduced air pollution by harmful substances working area compared to small-scale production. Large-scale production at the existing power and having a volume of total emissions and discharges of hazardous substances does not pose a significant danger to the environment objects.

-styrene, production processes, emissions, discharges, hazardous substances.

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	3	34,2	1,3	12,7	1,3
	2	12,6	-	0,8	-
	2	31,1	0,1	10,9	0,1
	3	0,3	0,8	0,3	0,8
	2	0,9	0,04	-	-
		79,1		24,7	

-

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\			
1		3696,3	1,7
2		839,2	1,0
3		13986,0	
4		1778,2	23,5*
5		2557,4	48,6*
6		6073,9	21,4*
7		1198,8	10,5*

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Фармацевтические науки

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МЕХАНИЗМ ОТРИЦАТЕЛЬНОГО ИНОТРОПНОГО ЭФФЕКТА ПРОИЗВОДНЫХ ДИТЕРПЕНОИДНОГО АЛКАЛОИДА АТИЗИНА, 15-ГИДРОКСИАЗОМЕТИН АТИЗИНА И 15-АЦЕТОКСИАЗОМЕТИН АТИЗИНА

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THE MECHANISM OF THE NEGATIVE INOTROPIC EFFECTS OF 15-HYDROXYAZOMETHINE ATISINE AND 15-ACETOXYAZOMETHINE ATISINE A DERIVATIVES OF DITERPENOID ALKALOID ATISINE.

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[1]Institute of Bioorganic Chemistry, Uzbek Academy of Sciences,
[2]Institute of Chemistry of Plant Substances, Uzbek Academy of Sciences.

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15- - -

- - - - - -*AAA.*

Na+- -

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Na+- - -

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ABSTRACT

Purpose: To study the mechanism of negative inotropic effects (NIE) of 15 hydroxyazomethine atisine (15-HAA) and 15 -acetoxyazomethine atisine (15-AAA), a derivatives of diterpenoid alkaloid atisine, in order to understand the possible reasons for the lack of correlation between inotropic and antiarrhythmic activity of 15-AAA.Materials and Methods: The inotropic effects of 15-HAA and 15-AAA were studied using rat papillary muscle isolated from the left ventricle. Contractions of muscle, induced by field stimulation were recorded using the force displacement transducer (Type F30, HSE) and pen recorder (TZ 4620, Czech Rep.). Results: The NIE of 15-HAA and 15-AAA markedly decreased in the presence of nifedipine and lidocaine as well as after inactivation of Na+-channels. The blockage of Ca2+-channels more markedly reduced the effect of 15-HAA but to lesser extent the effect of 15-AAA. In contrast, the blockage of Na+-channels or their inactivation, markedly reduced the effect of 15-AAA and to lesser extent the effect of 15-HAA. Conclusion: The NIE of 15-HAA and 15-AAA represents the sum of their Na+- and Ca2+-channel blocking properties. The difference in the NIE of alkaloids are predominantly related to their different potency to inhibit Ca2+- or Na+-channels and probably to the ability of 15-AAA to induce the positive inotropic effect (PIE). It is assumed that the lack of correlation between the inotropic and antiarrhythmic effects of 15-AAA as well as its more pronounced antiarrhythmic action may be due to its ability to induce PIE.

Key words: Alkaloids, negative inotropic effect, Ca2+- and Na+-channels.

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Ca2+-

-Aldrich

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- OriginPro

(15- 7.5 (OriginLab Corpo

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15- - -6).

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-AAA,

15- -

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NaCl-118; KCl-4,7; CaCl2-2,5; MgSO4-1,2; -

KH2PO4- -5,5; NaHCO3-25, pH-7,4.

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15- -

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Na+-

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- 15-

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2+-

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Ca2+-

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- - 15- -

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- -

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- Na+-

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- - - -

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- - 15-

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- Na+- -

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Na+/Ca2+-

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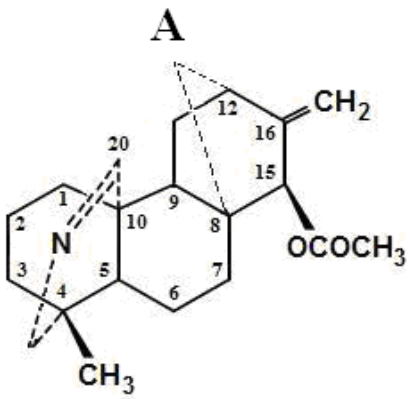

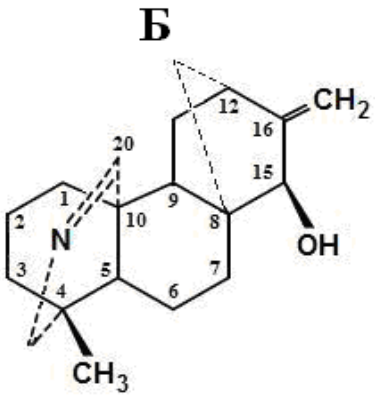

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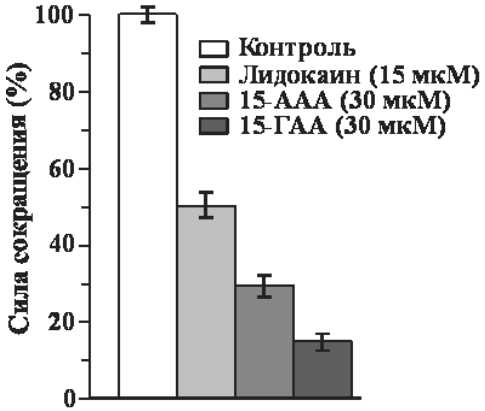
Сила сокращения (%)
100
80
60
40
20
0
Контроль
Лидокаин (15 мкМ)
15-ААА (30 мкМ)
15-ГАА (30 мкМ)

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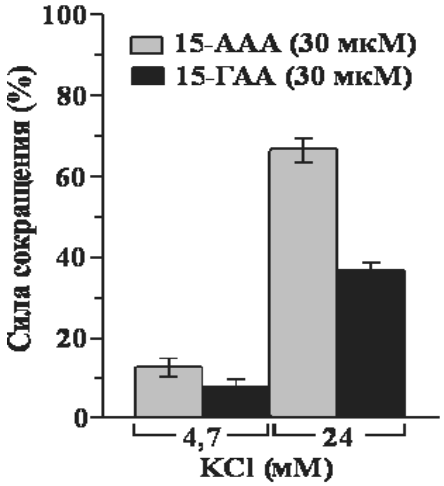
Сила сокращения (%)
100
80
60
40
20
0
15-ААА (30 мкМ)
15-ГАА (30 мкМ)
4,7
24
KCl (мМ)

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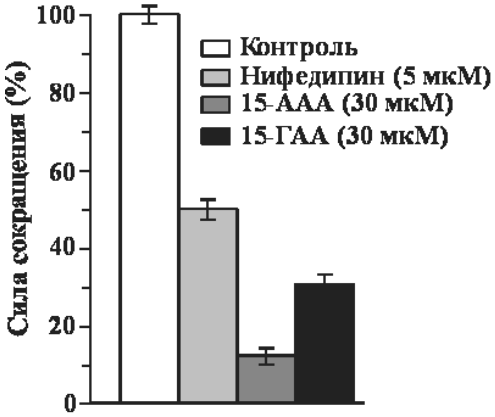
Сила сокращения (%)
100
80
60
40
20
0
Контроль
Нифедипин (5 мкМ)
15-ААА (30 мкМ)
15-ГАА (30 мкМ)

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