particular, 128,8% in the spinal ganglia of the cervical part, 107,8% - of the thoracic part and 104,6% - of the lumbar part of the spinal cord, from the control value (P<0,05) on the 5th day. By the end of the observation period (60th day) the retaining of increased LDH activity level is marked, being 154,1% in the neurons of the cervical part, 143,8% - in the thoracic part and 122,3% - in the lumbar part of the spinal cord, from the basal value (P<0,05), that testifies a significant change of LDH activity in the specified cells when being exposed to X-rays.

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INFLUENCE OF MICROVAWES ON EPIDERMAL SKIN CELLS

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During the last years in everyday life and industry as well as while taking diagnostic remedial measures, sources of SHF radiation (microwaves) get more and more popularity. In this respect the necessity to study biochemical changes in epidermal skin cells, including basaliocytes, while being affected with microwaves, develops.

The research was carried out on 65 mature guinea-pig males. The animals were exposed to the effect of microwaves of thermal intensity (length of wave - 12,6 cm, power flow density (PFD) – 60 mW/cm2, exposure time – 10 min). The exposure happened at one and the same time – from 10 to 11 a.m.. Excluding the animals from the experiment and sampling the materials were done immediately, in 6 hours, on the 1st, 5th, 10th, 25th and 60th days after finishing the effect of the specified factor. The flaps of skin were taken from different areas (head (cheek), back, stomach). The succinate dehydrogenase (SDG) and nicotinamide adenine dinucleotide 2 (NADN2) activities in the cytoplasm of the epidermal basal layer were subjected to the histoenzymologic research. The findings were statistically treated with the use of Student criterion.

Immediately after the microwave exposure the SDG and NADN2 activity decrease is marked, being: in the skin of head - 92,3% (98,0%), back - 90,8% (95,5%), stomach - 88,3% (97,7%), from the basal value accordingly (P<0,05). Later on the SDG and NADN2 activities keep on decreasing, achieving the minimum on the 5th day. Thus, in particular, the SDG activity on the defined term is: in the skin of head - 90,0%, back - 86,4%, stomach - 78,2% (P<0,05). In the following periods the SDG and NADN2 activities in basaliocytes increase, reaching the initial showings in most of the flaps on the 60th day, the SDG activity level in basal skin cells of back and stomach being 97,3% and 95,1% from the control level accordingly (P<0,05). The findings received testify significant changes of the SDG and NADN2 activities in the cytoplasm of the epidermal basal skin cells when being exposed to microwaves.

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SIGNIFICANCE OF THE β -2-ADRENERGIC RECEPTOR (β-2AR) POLYMORPHISM IN ASTHMA AND ATOPY

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Last years many researchers specify growth of allergic diseases, resistant to traditional methods of therapy. From the earliest stages of occurrence of the doctrine about an allergy allergic reaction consider as reaction of an inflammation. Complexity of process will be, that attributes of an inflammation are reflection of a mobile combination of effects of the various cells which are taking place in a different functional condition, different intermediaries (mediators), having different concentration and diffusion characteristics. Atopy is wide and multiplane pathological process. The estimation of this pathological process from positions of the general pathology means the analysis of the reasons and the general laws of development atopy. Discussion at a modern level of the theory

about decrease β-adrenergic reactance, as is meaningful to basis of development atopic diseases.

At atopic diseases decrease β-adrenergic reactance comes to light. It is shown by a smaller degree glikogenolis, lipolis, increases arterial pressure and educations cAMPH in leukocytes at addition of adrenaline. There is growing evidence, that asthma and atop are genetically linked, although the genetic control of both diseases may be present at several levels sensitization and specific IgE responses, mediator release, end organ responsiveness or phenotype expression**.** It is assumed, that asthma may be a result of primary defect of β-2AR function, that an impaired β-adrenergic function may be also related to IgE responsiveness and atopy.

New exciting data are related to the recently found polymorphism of the β-2AR. The gene for the β-2AR, which is localized close to the IL-4 gene duster on chromosome Sq, has been previously cloned, and sequenced. It is established that several point mutations exist within the gene coding region, resulting in changes in the amino acids sequence. It is shown, that the changes in the aminoacid sequence of the extracellular aminoterminus of the receptor affected the function of the receptor. For example, the presence of glycine at position 16 (Glyl6) was associated with enhanced regulation of the receptor in the response to agonist as compared to arginine at this position (Arg16), and substitution of Glu for Gln at position 27 resulted in a decreased regulation of the receptor. It is assumed, that this polymorphism may affect bronchial smooth muscle function in vivo. In fact, study of the Gln/Glu 27 polymorphism, and airway hyperreactivity in a group of patients with mild to moderate asthma revealed that Gln27 homozygotes had a four-fold higher bronchial hyperresponsive-ness to methacholine (lower threshold dose), than patients who were homozygous for the Glu27 form of the receptor; heterozygotes had an intermediate hyperreactivity. Population study, demonstrated similar frequency of Gly/Arg16 and Glu/Gln27 polymorphism in asthmatic and normal subjects. It is indicating, that polymorphism is not a major cause of asthma. However, comparison of the frequency of the β-2AR genetic variants in patients with nocturnal and non-nocturnal asthma reveled, that the Gly 16 allele was significantly more frequent in the nocturnal group as compared to the non-nocturnal group.

These data indicate, that β-2AR polymorphism may be closely related to the asthmatic phenotype, and severity of the disease. Since β-2AR are present on immune cells like lymphocytes, macrophages and granulocytes, being involved in modulation of inflammatory mediators and cytokines release, it has been postulated that, genetic polymorphism of β-2AR may also be associated with the expression of the atopic phenotype.

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THE USE OF INTERFERONS IN CHRONIC VIRAL LIVER DISEASES

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The increased disease a chronic hepatitis and low efficiency of treatment causes necessity of profound their studying immunopathogenesis and development of new methods of therapy. The broad effects of intercellular actions of interferons (IFN) can be roughly divided into: a) antiviral, b) anticancer, c) immunomodulatory. IFN are not produced constantly, so that their concentration in normal tissues is minimal or undetectable. However, after stimulating factors, esp. infections, their level in tissues highly increases, as a result of the activation of immunocompetent cells; later IFN bind to their specific receptors.

The strongest antiviral action exerts IFN-α. It influences all the stages of viral replication, but most important is inhibition of the genome translation, what makes defective the synthesis of viral proteins (kinases phosphorylate). The second mechanism of translation inhibition is the