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TO THE QUESTION OF NUTRITIONNAL THE STRUCTURE OF SOME OF THE PERIPHERAL BRANCHES OF THE TRIGEMINAL NERVE

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A review of the literature concerning vnutriorgannogo structure of the cranial nerves showed that the issue of interest to many researchers. There are a number of works on nutritionsome structure of the trigeminal nerve, However, they were studied mainly to its intracranial section (big and small parts of branches from a node). As for vnutriorgannogo study of its peripheral branches, the issue in literature is not enough.Therefore, in the present communication we present the results of infraorbital, buccal, and mental nerves. The study of these nerves is carried out by the method of Weigert-PAL for 10 adult cadavers from both sides.The results of the study showed that infraorbital nerve consists of fibers, especially small and medium caliber (80%) with a predominance of fibers having a diameter of 5-8 microns (45-50%).

Moreover, fibers with a diameter of 5-8 microns make up 48-50% and fibre diameter 1-4 microns accounted for 40-42%. Fibers with a diameter of 9-12 microns make up only 10-12%. Additionally, this nerve is detected and very large fibers, but their number is insignificant – 1%.In the lingual nerve are found in mainly meat fiber small and medium diameter – 95-97%. Meat fibres, having a diameter greater than 8 microns are few, they account for only 3-5%. Very large meat fibers in this nerve is not detected. The composition of the branches of the mental nerve in the percentage of meat fibers is not significantly otlichatsya of from the composition of the branches of the infraorbital nerve. Basically it is formed by fleshy fibers, thin and medium caliber preference fibers of medium caliber (53-55%). But meat fibers thick diameter smaller than the infraorbital nerve from 7 to 10%. Fibers having a diameter greater than 12 microns, up to 0.5%.

Thus, in the investigated peripheral branches of the trigeminal nerve the bulk of the fleshy fibers form a fiber medium and small caliber (77-90%). The number of thick fleshy fibres first place is nerve (23-27%), followed by buccal (10-15%), infraorbital (8-10%), chin (6-8%) and, finally, the lingual nerve (3-5%). These nerves also differ in the number they are very thick fleshy fibres. So, if the branches of the infraorbital, buccal, and mental nerves are very thick fleshy fibers (0,5-2%), in osnovana and lingual nerves are absent.

INFLUENCE OF THE SHARP AND CHRONIC HYPOXIA ON STRUCTURE OF NERVOUS ELEMENTS OF THE BRAIN

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Introduction. The question of influence of hypoxia, in particular, high-rise hypoxia on a structure of the central nervous system is widely reflected in literature. Many authors not only in details described morphological changes of nervous system at a sharp hypoxia and established that they depend as on degree and duration of oxygen starvation, and on time of experience of an animal after influence of a hypoxia.

Work purpose. The purpose of our work animals had a studying of changes of nervous tissue of a brain and studying of these structures in the course of gradual a training to the accruing high-rise hypoxia.

Materials and methods of a research. There was a carried-out analysis of literature, especially works which it was carried out directly over laboratory rats.

Results. On the basis of studying and the analysis of this subject it is possible to draw a conclusion that the faltering training of rats in the conditions of a pressure chamber causes permanent adaptation to a hypoxia.

Conclusions. Data confirm the situation, known from literature, that activation of synthesis of nucleinic acids and proteins is one of reliable mechanisms of adaptation to a hypoxia at the molecular

and cellular levels. Also it was revealed that many neurons of bark have signs which indicate the increased functional activity of a kernel and kernel.

EVOLUTION AND HOMOLOGY OF THE ABDOMINAL CAVITY OF THE PERSON

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Introduction. Recently it is presented big construction of a homology of lymph nodes of mammals in which it is pointed out lack of the only nomenclature of lymph nodes, as on a serious complication at establishment of their homology

Work purpose. To analyze evolution and a homology of an abdominal cavity of the person.

Materials and methods of a research. Literature on this subject was studied. It is represented that terms of human anatomy are the main for designation of lymph nodes as lymphatic system of the person is studied most fully, and it is necessary to proceed from them in establishment of a homology of lymph nodes of the person and mammals. The concept "lymphatic center" is excessive as groups of lymph nodes are stages of a lymphatic way, and treatments them as speak rapidly it, but not the centers, is more correct and meets the requirements of clinic.

Results. The main thing in a research of a homology of lymph nodes is passing of their communications with bodies through by-pass lymphatic vessels of the last and only on the basis of these communications possible definition among lymph nodes what to a back belly wall of the person, two different groups of knots, namely: groups of lymph nodes which develop in connection with outflow of a lymph from bodies of digestive tract, and group of lymph nodes which develop in connection with the bodies adjacent to a back belly wall (kidneys, gonads).

Conclusions. In our opinion, researches of a homology of lymph nodes have to be inseparably linked with a research of a lymphatic way from bodies on all its draft.

ULTRASTRUCTURAL CHANGES OF THE THYMUS IN THE CONDITIONS OF GENERAL DEHYDRATION

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Introduction. The thymus is extremely sensitive to ekopathogenic factors and quite fast undergoes involution which negatively impacts the immunity. Acute water shortage in extreme natural conditions, various pathological agents lead to structural changes of several organs and systems, so it was our aim to reveal the features of ultrastructural changes in the thymus dehydration.

Aim of the research. To established in the experiment ultrastructural changes in the thymus in the condition of dehydration.

Methods. The experiment was conducted on 12 mature male rats. Six animals formed the control group, while other six animals were exposed to average degree of dehydration, rodents kept fully anhydrous diet for 6 days. Changes were studied on stained, using conventional methods, ultra-thin sections obtained by ultra microtome.

Results. Cellularity of the thymus cortex and medulla is quite high during the dehydration of average severity, however, it is lower compare to the control group. With the electron microscope imaging of thymus macrophages observed the signs of their activation, that is shown by cytoplasmic protrusions, large quantity of lysosome and phagosomes in the cytoplasm. Observed increased level of apoptotic lymphocytes, which nuclei have different sizes, irregular in shape, invaginated, contain condensed chromatin. Occasionally there are rounded mitochondria with destroyed cristae. The number of apoptotic lymphocytes increases, they are smaller in size with a condensed nucleus and nuclear fragmentation. Plasmacytes with expanded cisternas of granular endoplasmic reticulum, that is indicate immunoglobulins metabolism disturbance with a change towards intracellular