

МІНІСТЕРСТВО ОСВІТИ ТА НАУКИ УКРАЇНИ  
СУМСЬКИЙ ДЕРЖАВНИЙ УНІВЕРСИТЕТ  
МЕДИЧНИЙ ІНСТИТУТ



**АКТУАЛЬНІ ПИТАННЯ**  
**ТЕОРЕТИЧНОЇ ТА КЛІНІЧНОЇ МЕДИЦИНИ**  
**Topical Issues of Theoretical and Clinical Medicine**

**ЗБІРНИК ТЕЗ ДОПОВІДЕЙ**  
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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