ОСОБЕННОСТИ СТРОЕНИЯ ПРЕДЦЕНТРАЛЬНОЙ ИЗВИЛИНЫ ГОЛОВНОГО МОЗГА ЧЕЛОВЕКА В ЗАВИСИМОСТИ ОТ ВОЗРАСТА

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PECULIARITIES OF THE ANTERIOR CENTRAL GYRUS STRUCTURE OF THE HUMAN BRAIN DEPENDING TO THE AGE

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Learning morphology and peculiarities of cellular consist of the human brain is an actual question of the modern medicine. The brain is one of the greatest evolutionary secret. Anterior central gyrus is a crucial stricture of the pyramidal system of the human brain. Fibers of pyramidal system cause stimulations of motoneurons of flexor muscles, especially at the influence to upper extremities and its fingers. Special interests are represented by interactions of neurons and glial cells in the human brain cortex and particularly the portions of cortex which provide the motor functions.

In this regard the goal of the researching was learning neuron-glial-capillary relation of the anterior central gyrus of the human brain depending to the age.

The researching of brain cortex was carried out on serial histological sections. The fragments of anterior central gyrus (more precisely its middle part is motor area cortex region) were taken for learning. We used such researching methods as morphometric, morphological and statistical data processing.

During researching the portion of the human brain cortex of the middle part of the anterior central gyrus motor region were detected following peculiarities: there is decreasing of the quantity of neurons and the capillaries in the third and fifth layers of the human brain cortex with the age. In parallel of that there is proportionally increasing of average quantity of glial elements, which is confirmed by changes of appropriate indexes. The last one reflects compensatory-adaptive response of the organism in general and the human brain in particular.

Thus, with the age increase there is proportional decrease of average quantity of neurons and proportional increase of average quantity of glial cells in the third and the fifth layers of the human

brain cortex. Decreasing of average quantity of the capillary in the layers of human brain cortex in the age aspects explain the changes of trophicity of the substance of the brain and increasing of average quantity of the glial elements, that as is generally known as is metabolically active and provide homeostasis and neuron function.