

## HIGHER NERVOUS ACTIVITY AND BRAIN AND NERVOUS SYSTEM.

**Rakhimova Feruza**

a teacher at Kokan University. Students of Kokan University:

**Baxriddinova O'g'ilxon Fazliddin qizi**

**Jo'raboyeva Saodat Fayzullo qizi**

**Sharifova Mahliyo Jaxongir qizi**

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**ANNOTATSIYA:** The human brain is one of the most complex and unsolved riddles in the universe. About the human brain, almost all philosophers who lived before Christ wrote down their ideas about medicine and psychology, because they connected the source of spiritual forces with the human brain.

**Key words:** Brain, memory, nervous system, neurons, dendrites, membrane, theories and facts of scientists.

**Enter.** Human cerebral hemispheres have a complex structure. The average human brain is 1350-1400 grams. The shells of the hemispheres have many ridges and serpentine folds (for example, they are located like the kernel of a walnut). The human brain is an organ of the central nervous system based on the Latin word, which means many interconnected nerve cells and their processes. The human brain occupies almost the entire brain part of the skull, its bones protect the brain from external mechanical damage. As noted by the famous neurologist Cangeux, he predicted: "If the 20th century was the century of atomic and molecular biology, the 21st century will undoubtedly be the century of brain research," and there is some truth behind this. The human brain is such an organ that it is amazingly miraculous. He can rarely carry out huge assignments and tasks that are difficult for him to understand. In the 1960s, American neuroscientist Eric Kandel coined the slogan for brain research to become a science. Charles Sherrington, his contemporary, conducted research on the basis of neurology in 1857-1952. In 1904-1983, Harry Grundfest, together with the professor of neurology at Columbia University, presented various innovations and scientific concepts to the science of the importance of this field. He was awarded the Nobel Prize in 2000 for his outstanding services. This award and after his long research can be the basis for describing Eric Kandel as a leader in the field. Although the human brain is a simple part of the body weighing more than 1 kg, it has 100 billion neurons and 1 neuron with 10,000 synapses, so that we can understand the events and processes that take place around it. It is a part of our body that allows us to exchange information, store information, and at the same time, feel our inner experiences such as pain, joy, love, sympathy, and express our feelings.

Brain and its functions. The brain is the largest part of the brain. In humans, the brain is the largest and the largest of the five main lobes of the brain. The brain consists of two cerebral hemispheres and their cortices. From the outside, there is a layer of gray matter, which lies below - consists of areas of white matter. The brain consists of two C-shaped hemispheres, and the brain is separated by a longitudinal slit of the deep brain. The cortex of the brain is the outer gray layer found only in sutemizuchis. The cortex of the brain has ridges and folds that reach 2000-2500 cm above the level of the cortex. 70% of the bark of the snake corresponds to the folds. The thickness of the cortex of the hemispheres is from 2mm to 4mm. The bark is composed of several layers. The brain is mainly composed of 85% water, 170g of fat, three tablespoons of salt and a number of complex molecules. This layer consists of approximately 14 billion cells. Cells are the same in terms of shape, size and function. Some of the sensory cells receive stimuli from different organs, while others, i.e. sensory cells, receive stimuli from the same organs. The brain is divided into 4 parts: Forehead, crown, nape and temple. The brain is roughly divided into symmetrical left and right cerebral hemispheres. It should also be mentioned that the brain consists of many parts and areas and is a whole structure. The cerebrum is the main part of the brain that controls emotions, hearing, vision, personality, and many other functions. At the same time, it controls voluntary movements. If we think about the human brain: (If the human brain was very simple, we would not have been able to understand it, we would not have been able to understand anything). Despite the complexity of the human brain, scientists and philosophers of different nations have conducted research. A. A. Ukhtomisky was the first to prove the property of dominance in 1923. A person's behavior, perception, thinking, consciousness and all mental characteristics are family activities, which are related to the normal functions of the cerebral hemispheres and the nerve centers located in their cortex. The famous Russian physiologist I.M. Sechenov was the first to clarify the fact that all voluntary actions, thoughts and mental states of a person occur through reflexes in his book entitled "Cerebral hemispheres" written in 1863. The well-known scientist I.P. Pavlov further developed his idea about reflexes and created the doctrine of conditioned reflexes. He proves that the family nervous activity of a person is manifested with the help of conditioned reflexes.

if we pay attention to interesting facts:

- Every time you remember something, new neural connections are formed in the brain.

- The brain of people who consume alcohol temporarily loses the ability to remember.
- When a person is born, there are more nerve cells than when they grow up.
- All the statements that only the right and left side of the brain work are fabricated. In fact, they work without exchanging information.
- Cruelties and discrimination in the family have a great impact on the child's brain.
- The structure of the brain changes through unexpected news.
- Unfortunately, young families do not understand that talking or playing on a cell phone for a long time can cause brain tumors in children.
- Excessive snoring has a negative effect on the brain.
- The human brain consists of 100 billion neurons and trillion cells.
- Unity is good for the brain.
- The brain of young children consumes 50% of the glucose in the body. Therefore, they need a lot of sleep.

brief information about the nervous system. Nerve cells form the basis of the human nervous system. Each cell is called a neuron along with short branches (dendrites) and one long fiber (axon). The nervous system is mainly composed of a collection of neurons. I.P. Pavlov introduced the concepts of nervous system types (individual characteristics of animal and human higher nervous activity) into physiology. Like the whole body, substances are exchanged in the nervous system. Energy is generated as a biochemical process. In the functioning of the nervous system, physiologically active substances - mediators play an important role in the transmission of impulses from one neuron to another or another cell. More than a hundred years ago, the Spanish neuroatomist Santiago Ramon Yu Cajal, based on the color method of the Italian doctor Gamillo Golgi, defined neurons as He discovered the various functions of the brain cell and its coordinated movement. Specialists in the field emphasize that 100 billion neurons are formed in order to form the brain, i.e. the nervous system, before the baby is born while it is developing in the mother's womb. Memory is the mental process of remembering and, when necessary, recalling perceived objects and events or past experiences. Memory is one of the features of the nervous system, which is manifested in its ability to repeat external world events and behavior.

Let's pay attention to interesting facts.

- The human nervous system contains 10 billion neurons, and 1 times as many workers are made up of cells.

- The largest nerve cell is 1000 times larger than the smallest. The thickness of the thinnest nerve fiber is 0.5 micrometers (1000 micrometers = 1 millimeter), and the thickest one is 20 micrometers.
- The brain contains more than half of all neurons.
- The surface of the cerebral cortex is about 1468-1670 cm.
- There are 2,600,000 nerve fibers in the brain. There are 140,000 outgoing nerve fibers.
- Neurons are programmed to perform different tasks.

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