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## **THE FORMATION OF NEURON-GLIO-CAPILLARY RATIOS OF VENTROMEDIAL NUCLEUS OF THE HYPOTHALAMUS IN POSTNATAL ONTOGENESIS**

Scientific research is devoted to studying morphofunctional organization of the ventromedial nucleus of the hypothalamus in postnatal ontogenesis. For research were used hypothalamus of 20 male rats Wistar line 1–, 15–, 30–, and 120 days old. Were used histological and electronic microscopic methods. Found that newborn rats revealed only moderate electro-optical density of neurons that contain isolated immature neurosecretory granules. Glial cells are little differentiated and in neuropile are detected only without myelin nerve fibers, axo-somatic and Axo-dendritic synapses. With the increase of duration of postnatal period of ontogenesis increases area of neurons and their nuclei, but decreases nuclear cytoplasmic index.

Neurons are differentiated into light and dark neuroendocrine cells that contain well-developed protein-synthesizing apparatus: Golgi complex, granular

endoplasmic reticulum, progranules of neurosecretion, young and mature neurosecretory granules.

Volumetric density of neurosecretory granules increases in light neuroendocrine cells of 15-day-old animals and does not differ from the 1-month and 3-month-old animals, while in the dark neuroendocrine cells volume density of neurosecretory granules in all age groups of animals are significantly higher. The numerical density of capillaries and neurons decreases with age, and glial index increases. In the ventromedial nucleus in all periods of postnatal ontogenesis are more dark neuroendocrine cells than light, and at 3 months of age in the study appear isolated vacuolized neurons. With the increase of duration of postnatal ontogenesis among glial cells are allocated proto-plasmatic and fibrous astrocytes, microglial cells and oligodendrocytes. In neuropile appear myelin nerve fibers.