

THE COMPARATIVE CHARACTERISTIC OF THE NEURONS CONTAINING
THE HYPOXIA-INDUCIBLE FACTOR 1alpha AND 2alpha
IN THE BRAIN OF RATS AT HYPERTENSION

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Content of HIF-1alpha and HIF-2alpha-immunopositive neurons in a cerebral cortex at control group of Wistar rats and after 2, 4, 6, 8, 12, 16, 20, 24 weeks of development in them of renovascular hypertension (RVHT) was studied. At control group the immunohistochemical marker of HIF-2alpha in parietal cortex is not found, and HIF-1alpha is defined in a small amount of neurons. Within the first 4 weeks of RVHT the quantity of HIF-1 α -positive neurons increases especially considerably, many of which differ in intensive reaction. But in 8 weeks of RVHT the quantity of HIF-1alpha-positive neurons decreases and reaches control values. Other dynamics is observed among HIF-2alpha-positive neurons which are to be found only on the 6th week of RVHT, and in 14 weeks their contents reaches the maximum level. Then, after small reduction of the quantity of HIF-2alpha-positive neurons their content remains at the high level until the end of the observations.

Key words: brain, neurons, HIF-1alpha, HIF-2alpha, renovascular hypertension
