“Cerebral” is a new drug from the group of endogenous and pharmacological regulatory agents

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Trophinotropins (TT) or neurotrophinotropic growth factors (NGF) are the group of endogenous therapeutic factors which are actively secreted by cells of the organism being in the state of restoration after pathological process modeling or under recovery/remission. A distinctive feature of TT action is the activating influence on the cells of damaged tissues and organs along with their protective and immune-corrective mechanisms of action. “Cerebral” is the agent separated from nerve cells of the cerebral cortex of pigs, experienced bihemispheric autohemorrhagic stroke. It contains a complex of low-molecular pharmacologically active peptides (less than 1200 Da). The drug is characterized by its cerebrotropic multimodal action on nerve cells which may effect is a trigger trophinotropic regulatory action on secretion of NGF and other cytokines. Application of ‘Cerebral’ increases the level of synthesis and secretion of NGF in the conditions of experimental hemorrhagic stroke and at the same time does not influence synthesis and secretion of this growth factor in the intact animals. In the experiment, NGF secretion in the CNS was increased under intranasal way of introduction because the concentration of mRNA NGF was 0.05-0.74 pmol/l on the 2nd day after introduction (whereas concentration under intraperitoneal introduction was 0.05-0.10 pmol/l mRNA on the 2nd day) at the expense of express delivery of its molecules into the brain. The drug showed neuro-activating action in acute and remote from the beginning of stroke diseases periods, modifies cellular metabolism, restores unconditional reflex reactions and lost functions, activates the process of intellectual and psychoemotional activity.

Biography

Makarenko O M has completed his PhD degree at the Moscow Medical Stomatological Institute. He has completed his MD degree at the Institute of Higher Nervous Activity in Moscow. He carries out his Post-doctorate researches at the Institute of higher nervous activity and T G Shevchenko National University of Kiev. He is a Professor of the Psychology Department, the author of more than 100 articles in reputed journals and 4 monographs.

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