Correction of structural changes in stroke ischemic tissues in the central nervous system (CNS) by trophinotropine “cerebral”

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Investigation of pharmacological activity of brain trophinotropic factors that formed in brain cells is very true. Receiving from female pigs after brain’s hemorrhagic stroke recovery, medicine “Cerebral” is a peptide trophinotropines with brain protective, regulative, activative and modulative actions. Trophinotropine “Cerebral” was protected of the active zones of the axodendritic synapses. Destruction dendrites system of the microtubules in the pleximorph area of sensomotoric cerebrocortex is not so often registered in trophinotropine treated animals. It was shown, that “Cerebral” administration (0.01-0.02 mg/kg bow. imp., twice with the interval of day) to cats with experimental model of hemorrhagic stroke was accompanied with 70% decrease of mortality, reduced symptoms of the disease: recovered of limbs movements decreases of coordination disturbances and normalization of some reflexes. Under conditions of chronic emotional stress (15 days) “Cerebral” (0.1 mg/kg b.w., i.p., before and on the 9th day of stress exposure) prevented the decrease of rats body weight, reduced the concentration of initial and intermediate products of lipid peroxidation, normalized the activity of antioxidant enzymes (SOD and catalase) in hypothalamus and cerebro-cortex zones. “Cerebral” normalized spleen cytological parameters and blood neutrophils cytochemical reactions. Trophinotropine accelerates progress of structural and functional restoration of alterative neurons (activities effect), have a cytoprotective and different pharmacological properties-trigger and contrapoptotic actions in early post stroke period. This medicine was suggested for treatment of sharp periods of stroke and decompensation phases of disease have had an original medicinal form (nasal drops), which essentially, will simplify treatment patients.

Biography
Makarenko O M obtained his PhD degree at the Moscow Medical Stomatological Institute and MD degree at the Institute of higher nervous activity in Moscow. He carried out his Post-doc researches at the Institute of higher nervous activity and T G Shevchenko National University of Kiev. He is a Professor of the psychology department and is the author of more than 100 articles in reputed journals and 5 monographs (Lambert Academic Publishing).

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