

FEATURES OF HIGH-TECHNOLOGY NEUROMETABOLIC MEDICATIONS

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Cerebroprotectors, or neurometabolic stimulators positively affect the highest integrative brain functions. They improve mental processes, increase resistance of brain to various damaging factors, including extreme loads and hypoxia.

Besides, neurometabolic stimulators can reduce neurologic deficiency and improve cortical and subcortical interactions, restore energy metabolism, reduce processes of excessive peroxidation.

Modern therapy of cerebrovascular diseases introduces neurometabolic medication—sofexpressed antihypoxic and cerebroprotective action to treatment schedule.

Work purpose: to analyze this class of medications.

Results. There have been pointed out some innovative medications with mode of action differing from widely applied neuroprotectors.

Metaprot (“Farmproekt”, Russia). The medication mode of action activates synthesis of RNA, and proteins after that. Resulting inducible gluconeogenesis enzyme synthesis and resynthesis leads to increase of physical efficiency, and improvement of synthesis of mitochondrial enzymes and mitochondria structural proteins.

Cytoflavinum (NTFF Polisan Ltd., Russia) normalizes oxidation-reduction reactions, eliminates metabolic imbalance, increases formation of ATP in neurons, reduces production of free radicals, oppresses peroxide oxidation of lipids, restores activity of enzymatic antioxidant protection, effect positively neuromedia resulting from hypoxia, prevents ATP reduction in ischemic nervous cells, normalizes functional cellular insufficiency.

Citocoline (Ceraxon, Ferrer Internacional, Spain, Neuroxon, Arterium, Ukraine) is a predecessor of key ultrastructural components of cellular membranes (mainly phospholipids), it promotes restoration of damaged cell membranes, inhibits phospholipase action, preventing excessive formation of free radicals, prevents death of cells, effecting apoptosis mechanism, improves cholinergic transmission.

Conclusions. The carried-out analysis of modern neurometabolic medications proves their high pharmacological effect and low toxicity. One should note that almost all the analyzed medications are of foreign production. Topical problem of modern medicine and pharmacy is creation and development of a domestic medication of expressed neurometabolic activity and low toxicity.