

Influence of cholinesterase inhibitors on cognitive function: neuropsychological analysis

O.A. Krotkova

Ph.D. in Psychology, Senior Research of Clinical rehabilitation of neurosurgical patients Department at the Burdenko Neurosurgery Institute
okrotkova@nsi.ru

M.A. Akulov

Junior Researcher of Clinical rehabilitation of neurosurgical patients Department at the Burdenko Neurosurgery Institute
MAkulov@nsi.ru

V.O. Zakharov

Ph.D., Head of Clinical rehabilitation of neurosurgical patients Department at the Burdenko Neurosurgery Institute
zvo@nsi.ru

A group of 20 patients aged 52 – 78 years with chronic vascular cerebral ischemia and steady cognitive disturbances entered this study. The highest mental functions were estimated by standardized neuropsychological examination by a special score system. The first month of observation was control - patients received symptomatic, more often – antihypertensive therapy. In the following 2nd and 3^d months Reminyl (a step-by-step increase of dose from 4 to 16 mg a day) was added. During control monitoring no evident significant change of the mental status of patients has been marked. Use of Reminyl resulted in change of highest mental function, however it was not homogeneous. The most expressed positive dynamics manifested in indices of general activity, purposeful and control behaviour. Improved results were marked for all the tasks set for estimating fast attention or retaining programme activity. One more group of symptoms with a tendency to retrogress was related to the state of praxis. This special spectrum of influence of cholinesterase inhibitors on mental function only prove heterogeneous distribution of cholinergic projections in the brain and possible specific changes in group of patients treated with Reminyl. Longitude follow-up of patients permitted us to discuss the problem of complex rehabilitation effect – change of quality of life of the treated patients was closely connected with change of the objectives (tasks) for the proximate social surrounding.

Key words: defects cognitive spheres, neuropsychological research, anticholinesterase drugs, integrated approach of rehabilitational influences.