

EXAMINATION OF ATTENTION BY USING COGNITIVE EVOKED POTENTIALS IN THE EARLY STAGES OF PARKINSON'S DISEASE

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Objectives: Preservation of attention is a necessary condition for cognitive functioning. The study objective accentuates the importance of cognitive evoked potentials - P3 wave in the early diagnosis of cognitive dysfunction, before the initial clinical manifestation of dementia in Parkinsonian patients.

Methods: Our study included 50 patients (35 males and 15 females), aged 45 to 72 years, in the early (I and II according to Hoehn and Yahr scale) stages of Parkinson's disease. In the control group were the same number of healthy, age appropriated subjects of both sexes. Mini Mental State Examination was within normal limits in all subjects.

Results: An increase in the mean latency P3 waves was recorded in these patients. In Parkinsonian patients, the mean value of the P3 wave latency was 374.0 ± 26.2 ms, and in the healthy control subjects 331.0 ± 23.3 ms. Statistically significant differences in mean values of P3 wave latency, between patients and healthy controls subjects, confirms that conscious recognition of the change in the number of stimuli is longer in patients with PD, although not clearly demonstrated signs of dementia.

Conclusions: Cognitive evoked potentials - P3 wave is an endogenous response to the given task, and depends on the perceptual and cognitive activities. It may be an additional diagnostic tool in the early detection of cognitive dysfunction, before the initial clinical manifestation of dementia.