

Cognitive evoked potentials P300 and CNV in patients' with Parkinson disease

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Introduction: The use of cognitive evoked potentials is useful in many neurological disorders.

Material and methods: A descriptive and traverse study was performed in patients with Parkinson's disease of the Neurology and Neurophysiology department of the Santiago General Hospital "Dr. Juan Bruno Zayas" from Santiago de Cuba, during the period from March 2017 to May 2018. The cognitive evoked potentials (P300-CNV) and a clinical neuropsychological evaluation were carried out.

Objective: To identify the relationship possible between cognitive evoked potentials and clinical-neuropsychological variables as diagnostic of the cognitive alterations that occur in patients.

Results: a significant prolongation of the latency, with a decrease in the amplitudes of the P300 and CNV with modifications in the morphology of the potential when the clinical neuropsychological evaluations were altered. These suggest that exist a delay in the cognitive processing of information, a decrease in the intensity of selective attention processes and hypofunction in cortical activation with asynchrony in the neurogenerators, in patients with Parkinson's disease, when the clinical and cognitive evaluations are altered. **Conclusions:** the cognitive evoked potentials are useful, and complement the clinical and neuropsychological evaluation.

Key words: cognitive evoked potentials, CNV, P300, Parkinson's disease