Abstract

Diagnosis of Parkinson’s disease dementia is a challenge in clinical settings. A comprehensive neuropsychological evaluation is time-consuming and expensive; brief instruments for cognitive evaluation must be easier to administer and provide a reliable classification. Objective: To study the validity of the Brazilian version of Addenbrooke’s Cognitive Examination-Revised (ACE-R) for the cognitive assessment of Parkinson’s disease (PD) patients with heterogeneous educational level. Methods: Patients were evaluated according to the diagnostic procedures recommended by the Movement Disorder Society (MDS) as the gold standard for the diagnosis of dementia in PD. Results: We studied 70 idiopathic PD patients, with a mean (SD) age of 64.1 (9.3) years and mean disease duration of 7.7 (5.3) years and educational level of 5.9 years, matched for education and age to controls. Twenty-seven patients fulfilled MDS clinical criteria for PD dementia. Mean scores on the ACE-R were 54.7 (12.8) points for patients with PD dementia, 76 (9.9) for PD patients without dementia and 79.7 (1.8) points for healthy controls. The area under the receiver operating curve, taking the MDS diagnostic procedures as a reference, was 0.93 [95% CI, 0.87-0.98; p<0.001] for ACE-R. The optimal cut-off value for ACE-R was 72 points [sensitivity 90%; specificity 85%; Kappa concordance (K) 0.79]. Conclusion: ACE-R appears to be a valid tool for dementia evaluation in PD patients with heterogeneous educational level, displaying good correlation with clinical criteria and diagnostic procedures of the MDS.

Keywords

Parkinson’s disease, dementia, screening tests, neuropsychology, cognitive evaluation.