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Research Article

Subtypes of mild cognitive impairment in parkinson's disease: Progression to dementia

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KEYWORDS

Parkinson's disease • mild cognitive impairment • dementia

ABSTRACT

The aim of this study was to establish the rate of progression from mild cognitive impairment (MCI) to dementia in patients with Parkinson's disease (PD). PD patients without dementia were recruited in 1997 from an ongoing prospective epidemiological study. The assessment included neurological and psychiatric examinations, a clinical interview based on the Diagnostic and Statistical Manual of Mental Disorders, Revised Third Edition (DSM-III-R) criteria for dementia, and a battery of neuropsychological tests. PD was diagnosed according to established criteria, dementia was diagnosed according to the DSM-III-R criteria, and subtypes of MCI were classified according to modified Petersen's criteria. Seventy-two nondemented PD patients were included. A total of 34 were cognitively intact, whereas 38 were diagnosed with MCI (amnestic, n = 6; single nonmemory domain, n = 17; multiple domains slightly impaired, n = 15). Fifty-nine patients (82%) completed follow-up examination 4 years later, and 18 (62%) of the patients with MCI and 6 (20%) of the cognitively intact PD patients were demented (P = 0.001). Single domain nonmemory MCI and multiple domains slightly impaired MCI were associated with later development of dementia (P = 0.003; P = 0.04), whereas amnestic MCI subtype was not (P = 0.76). We conclude that patients with PD and MCI had a higher risk of developing dementia than cognitively intact PD patients, suggesting that MCI in PD is an early manifestation of dementia. However, these findings should be interpreted with caution due to the relatively small number of subjects included in this study. © 2006 Movement Disorder Society

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