Cognitive Impairment and Dementia in Chinese Parkinson’s Disease

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Background: The incidence of dementia in Parkinson’s disease (PD) among Caucasians varies between 42.6 and 112.5 per 1000 person-years. Since genetic and cultural factors may affect manifestation of dementia, incidence of dementia among Chinese PD patients may differ to that of Caucasian PD patients. We aimed to study the incidence and predictors of dementia among Chinese PD patients. To date, such data are not available in the literature.

Method: A total of 132 Chinese PD subjects (mean age 59.7 ± 9.1 years; male 67.4%) participated in this study. These subjects were participants of a clinical study. At baseline, all subjects were not demented and Chinese mini-mental state examination (MMSE) score was obtained. We performed cognitive assessment 3.5 years later. We defined dementia according to the Movement Disorder Society Task Force Clinical Diagnostic Criteria for PD dementia. We defined significant cognitive decline as a drop of MMSE score of ≥3. We investigated the association between putative baseline factors and incident significant cognitive decline and dementia.

Results: Nine subjects (6.8%; incidence rate of 20.0 per 1000 person-years) developed dementia and 29 (22%) subjects had significant cognitive decline at the end of follow-up. Multivariate analysis showed that age (odds ratio=1.4; 95% confidence interval, 1.01-1.28), speech impairment (6.5; 1.60-26.48), and impaired pentagon copying (11.29; 3.31-38.50) were independent predictors for incident significant cognitive decline and dementia.

Conclusion: Incidence of dementia in Chinese PD is lower compared with that in Caucasian PD. Age, speech impairment, and impaired pentagon drawing are predictors for incident significant cognitive decline and dementia.

References