THE SPECTRUM OF NEUROPSYCHIATRIC SYMPTOMS IN PARKINSON'S DISEASE ACCORDING TO COGNITIVE FUNCTION

S. Choi, C.K. Ha, C.-S. Song, S.-H. Kim, I.-T. Han, C.-G. Hong, J.J. Park, N.Y. Ryoo, Y. Choi

Neurology, Inha University Hospital, Incheon, Republic of Korea

**Background & objective:** The aim of this study was to investigate the spectrum of neuropsychiatric symptoms in Parkinson's disease (PD) according to cognitive function.

**Methods:** Eighty five patients with PD were consecutively recruited: 21 patients in PD with normal cognition (PDNC) 39 in PD with MCI (PDMCI), and 25 in PD with dementia (PDD). Forty five healthy control subjects without memory complaints were also recruited. The caregivers of all participants administered the Caregiver-Administered Neuropsychiatric Inventory (CGA-NPI).

**Results:** There were significant differences of total scores of the CGA-NPI (23.0 ± 20.2 vs. 8.0 ± 13.2 vs. 1.5 ± 3.0 vs. 1.0 ± 1.6, p< 0.001), and the prevalence of neuropsychiatric symptoms (96% vs. 64% vs. 38% vs. 44%, p< 0.001) among PDD, PDMCI, PDNC and control groups. Depressive symptom was observed most often (62%), followed by delusion (50%), hallucination (50%), anxiety (46%), night-time behaviour (46%), and aberrant motor behaviour (35%) in PDD. Depressive symptom (34%), anxiety (32%), apathy (27%), and eating change (24%) were also commonly observed in PDMCI, but delusion, hallucination, euphoria and aberrant motor behaviour were seldom presented in PDMCI (less than 3%). The prevalence of neuropsychiatric symptoms in PDNC was similar to that in normal controls than PDMCI group.

**Conclusion:** Depressive symptom was the most common neuropsychiatric symptom in PD. The presence of delusion, hallucination, or aberrant motor behavior may differentiate PDD from PDMCI. The neuropsychiatric symptoms were not prevalent in PD with normal cognition.