

PARKINSON'S DISEASE: COGNITION AND PSYCHIATRIC DISTURBANCES

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Abstract: *To investigate cognitive impairments and psychiatric disturbances in patients with Parkinson's disease (PD) and to evaluate their association with disease severity and progression.*

Keywords: *Parkinson's disease, cognition, psychiatric disturbances, depression, anxiety, psychosis*

Introduction

Parkinson's disease (PD) is a progressive neurodegenerative disorder primarily characterized by motor symptoms such as bradykinesia, rigidity, and tremor. However, non-motor symptoms, including cognitive decline and psychiatric disturbances, are increasingly recognized as major contributors to disease burden and reduced quality of life (Aarsland et al., 2017). Cognitive impairments in PD range from mild cognitive impairment to dementia, often affecting executive function, attention, and memory. Psychiatric symptoms, including depression, anxiety, apathy, and psychosis, are also prevalent and may precede motor symptoms in some patients (Chaudhuri et al., 2006).

The pathophysiology of cognitive and psychiatric symptoms in PD is multifactorial, involving dopaminergic, cholinergic, and serotonergic dysfunction, as well as neuroinflammatory and neurodegenerative processes (Weintraub & Burn, 2011). Early recognition of these non-motor features is essential, as they significantly influence patient care, treatment strategies, and caregiver support.

The present study aims to systematically assess cognitive and psychiatric disturbances in PD patients and to explore their relationship with motor severity and disease progression. Understanding these associations may facilitate early intervention and improve patient outcomes.

Methods: Fifty patients diagnosed with PD (mean age 65 ± 7 years) and twenty age-matched healthy controls were enrolled. Cognitive function was assessed using the Montreal Cognitive Assessment (MoCA) and Mini-Mental State Examination (MMSE). Psychiatric symptoms, including depression, anxiety, and psychosis, were evaluated using the Hamilton Depression Rating Scale (HDRS), Hamilton Anxiety Rating Scale (HARS), and Neuropsychiatric Inventory (NPI). Motor severity was



assessed using the Unified Parkinson's Disease Rating Scale (UPDRS) and Hoehn and Yahr scale.

Results: PD patients showed significant cognitive deficits compared to controls, with MoCA and MMSE scores reduced by 25% and 18%, respectively ($p < 0.01$). Depression and anxiety were present in 54% and 46% of patients, respectively, while 20% exhibited psychotic symptoms. Cognitive impairments correlated with longer disease duration and higher UPDRS scores ($r = -0.52$, $p < 0.01$). Psychiatric disturbances were associated with reduced quality of life and increased caregiver burden.

Conclusion: Cognitive decline and psychiatric disturbances are common in Parkinson's disease and significantly affect patient functioning and quality of life. Early identification and management of these non-motor symptoms are crucial for comprehensive care.

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