

## Special Issue on Behavioural and Cognitive Changes in Lewy Body Dementias

# CALL FOR PAPERS

Dementia with Lewy bodies (DLB) and Parkinson's disease dementia (PDD) share many clinical and pathological features. They are therefore discussed together and referred to as Lewy body dementias (LBD). DLB may account for 10–15 percent of all cases of dementia. DLB can be diagnosed wrongly and is often mistaken for Alzheimer's disease (AD) or PDD. Whether DLB and PDD are distinct disorders or whether they represent different stages of the same disease is an area of ongoing investigation. Symptoms of each disorder may arise from variations in regional and temporal onset of neural dysfunction and degeneration. By consensus, when cognitive impairments are coincident with or appear within 1 year of the motor signs, DLB is diagnosed; the term PDD is used when the decline occurs in the course of the well-established Parkinson's disease (PD). Pathologically, both conditions are characterized by the presence of Lewy bodies and intraneuronal inclusions containing  $\alpha$ -synuclein and ubiquitin in the brainstem, limbic area, forebrain, and neocortex.

Early signs of cognitive impairment in patients with LBD include executive dysfunction, visuospatial impairment, and deficits in verbal memory. Executive dysfunction is a hallmark feature of LBD and includes impairment in set shifting, attention, and planning. Memory deficits in LBD are to be related to the retrieval of learned information, which is improved by cueing. The most common extrapyramidal findings on examination in LBD are rigidity and bradykinesia, whereas other common signs are hypophonic speech, masked faces, stooped posture, and shuffling gait. Depression, anxiety, apathy, and fatigue commonly occur in LBD and are closely associated with cognitive decline. Detailed visual hallucinations frequently occur in both conditions as well. There are often overlapping visual hallucinations and other disorders of visual perception, including misidentification syndromes and visual agnosia. Auditory, tactile, or gustatory hallucinations may also occur but are less common. Visual hallucinations and delusions occur in up to 50% of patients with PDD, and their presence is strongly associated with cognitive dysfunction. Several drugs used in the treatment of PD, including anticholinergic agents, dopaminergic agents, and amantadine can exacerbate psychotic symptoms. In nondemented PD patients, those with hallucinations are more likely to develop dementia than patients without this symptom.

This special issue aims to bring a multidisciplinary perspective and updated insight into the most recent advances in the field of neuropsychology of neurodegenerative disorders, emphasizing the most appropriate and disease-specific psychometric tools for evaluating behavioural and cognitive impairments in the range of LBD. Moreover, the impact of behavioural and cognitive abnormalities on the quality of life and prognosis of patients could also be addressed, giving some insights into the potential application of the early psychological interventions for reducing patients' and caregivers' distress. Neuroscientists from all over the world are invited to submit original research papers, clinical studies, and review articles to us.

Potential topics include but are not limited to the following:

- ▶ Common or distinctive biomarkers (genetic, physiopathological, and neuroimaging biomarkers, serum test, etc.) correlate with behavioural and cognitive changes in LBD
- ▶ Synaptic function and neural networks underlying behavioural and cognitive changes in LBD
- ▶ Disease-specific psychometric tools for measuring behavioural and cognitive changes in LBD
- ▶ Potential psychological or pharmacological interventions focused on behavioural and cognitive abnormalities of patients with LBD
- ▶ Population-based studies of pharmacological interventions, serum biomarker profiles, and psychometrics correlate with LBD

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/bn/bcd/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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