

key points

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It is estimated that up to 80% of patients with Parkinson's disease will eventually develop cognitive impairment over the course of their illness. Even at the time of diagnosis, cognitive impairment has been reported in 20-25% of patients. Commonly affected cognitive domains are executive function, visuospatial ability and attention control. In addition, patients with Parkinson's disease dementia may present with deficits in language function and verbal memory.

Psychosis may occur in approximately 40% of patients with Parkinson's disease, and is associated with an increased risk of developing cognitive impairment. In the early stages of Parkinson's disease, psychosis is most commonly characterised by visual hallucinations, such as 'presence' hallucinations (a feeling that someone is present) and 'passage' hallucinations (where a person, animal, or object is seen briefly passing in the peripheral visual field). As the disease progresses formed visual hallucinations of animals or people can also occur.

Studies have shown that patients with Parkinson's disease with a history of visual hallucinations had an increased risk of developing dementia, four to eight years following diagnosis of the disease. Other clinical risk factors associated with cognitive decline in patients with Parkinson's disease include older age of onset, severe motor symptom burden and in particular akinetic-rigid subtype and olfactory dysfunction.

Patients with Parkinson's disease who present with symptoms of cognitive decline, behavioural changes or psychotic symptoms should be referred for further investigation. Parkinson's disease patients with suspected cognitive impairment should be referred to specialist movement disorders clinics. The differential diagnosis in such cases is broad and includes Parkinson's disease mild cognitive impairment, Parkinson's disease dementia, Lewy body dementia, delirium, other dementias, other psychiatric and medical conditions, substance misuse and side effects of medication.

There are no pharmacological disease modifying therapies able to prevent or delay deterioration of cognitive impairment in Parkinson's disease, although some medications may ameliorate cognitive and behavioural symptoms. To date, randomised placebo-controlled trials support the use of cholinesterase inhibitors in the treatment of cognitive decline and psychosis in patients with Parkinson's disease. However, the response to treatment is variable and side effects such as worsening of tremor, nausea and vomiting may impair patient compliance. NICE recommends the use of psychological interventions for patients with Parkinson's disease dementia. These include cognitive behaviour therapy (CBT), animal-assisted therapy, reminiscence therapy, multisensory stimulation and exercise. CBT can also alleviate impulse control disorders in Parkinson's disease.