

Parkinson's disease dementia

Parkinson's disease dementia is a progressive brain disease that occurs in some, but not all, people living with Parkinson's disease. As Parkinson's disease progresses, changes to the brain caused by the disease may also affect cognitive abilities, which can lead to symptoms of dementia. These changes are caused by a large buildup of alpha-synuclein proteins that are associated with abnormal deposits called Lewy bodies.

Parkinson's disease dementia is diagnosed through a comprehensive assessment by your doctor.

It will often include a review of your complete medical history in addition to physical, neurological and/or psychiatric exams.

If cognitive changes are identified, it may also include:

- An MRI to rule out other causes of dementia
- A lumbar puncture (spinal tap) to help diagnose the type of dementia

If you or the person you are caring for lives with Parkinson's disease and experiences memory loss, difficulty thinking clearly, depression, hallucinations, or sleep disturbances, speak to a doctor. Some of these symptoms may be side effects of Parkinson's disease medications, but your doctor will want to conduct an assessment to rule out a diagnosis of dementia.

Dementia with Lewy bodies is also associated with abnormal "Lewy bodies" deposits, but cognitive symptoms (such as memory loss) appear before motor symptoms.

What is the difference between Parkinson's disease dementia and dementia with Lewy bodies?

When the person experiences dementia symptoms a year or more after motor symptoms appear, the diagnosis is **Parkinson's disease dementia**.

Symptoms of Parkinson's disease dementia

In addition to the motor symptoms associated with Parkinson's disease, a person living with Parkinson's disease dementia may experience:

- Problems with planning and decision making
- Memory loss
- Difficulty concentrating
- Poor judgment
- Lack of motivation
- Irritability and anxiety
- Sleep difficulties, including excessive daytime drowsiness, rapid-eye movement (REM) and acting out dreams
- Depression
- Difficulty interpreting visual information
- Visual hallucinations
- Paranoia

When the person experiences dementia symptoms before, at the same time as, or within one year after motor symptoms appear, the diagnosis is **dementia with Lewy bodies**.

There are treatments available to manage the symptoms of Parkinson's disease dementia.

There are currently no treatments to stop or slow Parkinson's disease dementia. However, there are strategies available to help manage the symptoms:

- **Cholinesterase inhibitors.** These medications are used to treat cognitive changes in Alzheimer's disease and may improve symptoms of dementia in Parkinson's disease, including sleep disturbances, visual hallucinations and changes in thinking and behaviour.
- **Antipsychotic medications.** The only safe antipsychotics to use in Parkinson's disease dementia are quetiapine or clozapine (which requires weekly blood tests). All other antipsychotic medications may cause side effects such as worsening of Parkinson's disease symptoms, so they should be avoided. For more information about medications available to treat Parkinson's disease dementia, speak to your doctor or pharmacist.
- **Selective serotonin reuptake inhibitors (SSRIs).** This type of antidepressant may be used to treat the symptoms of depression that can arise with Parkinson's disease dementia.
- **Occupational and physical therapies.** These are focused on balance and stretching exercises that may help to maintain physical functioning throughout the progression of the disease. **Speech therapy** has also been found to improve difficulties with verbal communication.

There are many things you can do to live well with dementia and maintain your brain health. For more information, visit alzheimer.ca/brainhealth.

Risk factors that may increase the risk for Parkinson's disease dementia include:

- Older age
- Greater severity of motor symptoms
- Having mild cognitive impairment
- Visual hallucinations (with no other dementia symptoms)
- Excessive daytime sleepiness
- Depression
- Family history of dementia
- Freezing of gait (a motor symptom pattern which includes "freezing" in mid-step), problems with balance and falling and difficulty initiating movement
- Longer duration of Parkinson's disease in the advanced stage
- Being male

Support is available.

Contact your local Alzheimer Society for more information about dementia.

Visit alzheimer.ca/helpnearyou

Additional resources.

Contact Parkinson Canada for more information about Parkinson's disease visit parkinson.ca.

Visit brainXchange.ca to search for webinars on Parkinson's disease dementia.

This resource is informed by research and the experiences of people living with dementia and their caregivers. We thank Dr. Susan Fox, Professor of Neurology, Toronto Western Hospital, Krembil Brain Institute, for her generous contribution to the development of this resource.

To provide feedback on this factsheet, please email publications@alzheimer.ca

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