

Lewy body dementia

This infosheet will tell you about Lewy body dementia, including its symptoms, how it gets identified, resources to help people living with Lewy body dementia, and more.

What is Lewy body dementia?

Lewy body dementia (LBD)—also sometimes known as dementia with Lewy bodies—is a form of dementia characterized by abnormal deposits of a protein called **alpha-synuclein**. These deposits, more simply called “Lewy bodies,” form inside the brain’s nerve cells.

What’s the difference between Lewy body dementia and Parkinson’s disease?

Lewy bodies are also found with **Parkinson’s disease**. The difference between Lewy body dementia and Parkinson’s disease depends on the area of the brain where the Lewy bodies first appear.

When Lewy bodies first appear in the part of the brain responsible for **thinking**, we say “Lewy body dementia.”

When Lewy bodies first appear in the part of the brain responsible for **movement**, we say “Parkinson’s disease dementia.”

Quick facts

- Lewy bodies are named after **Friedrich H. Lewy**, the scientist who first described them.
- In a person living with Lewy body dementia, the areas of the brain that direct thinking and moving are affected, causing the symptoms we associate with Lewy body dementia.
- Lewy body dementia can sometimes co-occur with **Alzheimer’s disease**, the most common form of dementia. Lewy bodies are found in up to 50% of people living with Alzheimer’s disease.
- What causes Lewy bodies to form in the brain’s nerve cells is currently unknown—though scientists are researching possible causes, which could lead to better treatments.

How does Lewy body dementia affect a person?

A person living with Lewy body dementia will experience a decline in thinking and memory over time. Even in the early stage, Lewy body dementia can affect the ability to plan and organize. It can also affect how quickly the brain can process information. Lewy body dementia also affects visual-spatial perception—our understanding of where objects are located in relation to each other. For example, visual-spatial perception helps a person place a pencil on a table without having to consciously concentrate on that action.

Other symptoms may include:

- Changes in attention and alertness; a state of confusion that comes and goes.
- Repeated visual hallucinations (seeing things that are not real) which can be worse during times of increased confusion.
 - These visual hallucinations typically consist of people, children or animals. People living with Lewy body dementia may also have fixed false beliefs, also known as delusions. These are often related to their hallucinations.
 - Additionally, hallucinations may lead people living with Lewy body dementia to make errors in how they see things, such as seeing faces in a carpet pattern.
- Impacts on motor functioning (that is, on moving and controlling muscles). This may include rigidity (muscle stiffness); tremors (shaking); stooped postures; or slow, shuffling movements. A person’s sensitivity to medications, especially some sedatives, may increase these symptoms.

- Disruptions during sleep, such as acting out dreams through rapid eye movements, talking or moving. This may occur years before other symptoms appear. Lack of sleep may make some symptoms worse, so it can be helpful to find time to rest at some point during the day to help with fatigue.

How is Lewy body dementia diagnosed?

No single test can diagnose Lewy body dementia. If a person is concerned they might have Lewy body dementia, it is best to tell a doctor. Doctors can diagnose it by eliminating other diseases and conditions that can cause similar symptoms. An assessment may include a neurological exam (brain and nerve test) that emphasizes gait (how a person walks), posture and degree of rigidity. Medical history, brain imaging (such as an MRI), physical testing and neuropsychological (brain and nerve function) testing can also be helpful in making a diagnosis of Lewy body dementia.

What are the risk factors for Lewy body dementia?

At present, there is no known cause of Lewy body dementia, and risk factors have not been identified. However, as mentioned earlier, Lewy bodies are also found in Parkinson's disease. And Lewy bodies are often found in the brains of people living with Alzheimer's disease as well. Genetics may play a role—if a person has a family member who has Lewy body dementia, there may be an increased risk for that person developing it. Lewy body dementia is also more common in men than in women. More research is being done to understand Lewy body dementia.

Can Lewy body dementia be treated?

There is no cure for Lewy body dementia at this time. However, it is sometimes possible to treat symptoms using medications associated with treating Alzheimer's disease, Parkinson's disease and hallucinations.

Cholinesterase inhibitors are medications used to treat Alzheimer's disease. They can improve alertness and cognition in some people with dementia and may reduce hallucinations and other distressing symptoms. However, due to the many different symptoms of Lewy body dementia and Parkinson's disease, treatment of one symptom may worsen another. One strategy to prevent this is to treat symptoms in order of their severity.

Behavioural therapeutic strategies also help people living with Lewy body dementia. These can include using physical activity and music as treatments. Research shows that quality of life for people living with dementia and their caregivers is significantly improved by activities that emphasize their strengths and abilities. By understanding a person's personality, life experiences, support systems and ways of coping, a **person-centred approach** to care can preserve and improve quality of life for the person living with Lewy body dementia.

This is just a very brief overview of some of the medications and therapies used in cases of Lewy body dementia. Talk to your doctor, pharmacist or other specialist about what is right for you.

Support is available.

Contact your local Alzheimer Society for more information about Lewy body dementia and to find support. Visit alzheimer.ca/Find for more information.

More resources

- Lewy Body Dementia Association lbd.org

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Alzheimer Society of Canada

20 Eglinton Avenue West, 16th Floor Toronto, Ontario M4R 1K8

National Office: 1-800-616-8816 Information and Referrals: 1-855-705-4636 (INFO)

 info@alzheimer.ca  alzheimer.ca

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