

Motor (physical) changes in Lewy body disease

This help sheet describes how Lewy body disease can cause changes in a person's motor abilities (when physical ability is affected). It describes common changes and strategies that may help.

- Lewy body disease is a neurodegenerative disease of ageing that causes gradual brain damage.
- It includes three overlapping disorders: dementia with Lewy bodies, Parkinson's disease and Parkinson's disease dementia.
- Lewy body disease causes changes in motor abilities (when someone's physical ability is affected).

Body movement and other changes

The impact of changes in body movement depends on the form of Lewy body disease diagnosed.

People living with dementia with Lewy bodies develop significant changes in their thinking, mood, behaviour and autonomic functions (involuntary functions like temperature control). However, the condition can also cause slowness, stiffness, tremor and falls like those seen in Parkinson's disease.

People living with Parkinson's disease develop significant body movement symptoms first. However, it can also cause changes in their thinking, mood, behaviour and autonomic functions.



Differences in motor changes

There are subtle differences in the way someone living with Lewy body disease is affected by motor changes.

In Parkinson's disease, the four most common motor symptoms are:

- bradykinesia (slow movement)
- rigidity (muscle stiffness)
- tremor (typically at rest)
- postural instability (difficulty maintaining posture and balance).

Symptoms often begin on only one side of the body and people can respond well to dopamine replacement therapies (such as levodopa).

In dementia with Lewy bodies, the movement symptoms are similar but may include:

- more rigidity of the torso
- earlier balance problems
- less tremor or tremor not only at rest but when using the hands
- symptoms on both sides of the body.

People have a less dramatic response to dopamine replacement therapies.

It is important to discuss changes in motor skills with a doctor or medical specialist when seeking a diagnosis. A correct diagnosis will inform the most appropriate treatment plan.

Other motor factors

Visuospatial ability

Motor problems coupled with visuospatial ability around depth, space and distances, affect how someone living with Lewy body disease successfully navigates their environment. There is an increased risk of falls when challenged by uneven surfaces, steps and stairs.

Fluctuations in ability

Lack of motor control is made worse by fluctuations in ability over a period of hours or days. Walking may be an appropriate leisure activity one day and more challenging on another.



Orthostatic hypotension

People living with dementia can lose the ability to automatically regulate blood pressure. Orthostatic hypotension is a form of low blood pressure that happens when standing after sitting or lying down. The person may feel faint, increasing their risk of falls.

Speaking and swallowing

Dementia can cause speech to become slower and less fluent, and the person may swallow less frequently. As the disease progresses, these changes may become more obvious. Changes can include the loss of the gag reflex, which may lead to inhaling food or drink into the lungs or respiratory tract, and pneumonia.

Tips for managing motor changes

Movement disorder clinics and health professionals who specialise in maintaining mobility, independence and safety (occupational therapist, physiotherapist, speech pathologist) can help with assessing and managing the physical challenges of Lewy body disease.

The following strategies have been sourced in part from parkinsons.org.au

Maintain mobility and independence

Ways to help:

- Encourage the person to maintain their physical activity within their ability. Suggest a daily walk together or attend a gym class (discuss with gym staff). Be aware that it can be difficult for someone to perform fine motor skills and movements like "lift your leq".
- Encourage good posture and daily stretches.
- Encourage wearing appropriate footwear (closed with flat or low heels, velcro tabs, no laces).
- Provide alternatives to small buttons on clothes.
- Encourage independence for as long as possible.



Reduce the risk of falls

Falls may occur for many reasons including:

- balance problems
- · low blood pressure
- · a shuffling walk
- turning corners
- dual tasking.

Avoiding falls is essential. Serious injuries such as fractures (commonly hip or skull) may result.

The fear of falling and associated loss of confidence may be as disabling as an actual fall.

Ways to help:

- Remove unnecessary mats.
- · Maintain an uncluttered environment.
- Suggest slow movement from lying or sitting positions and remain by the bed or chair for a short period of time.
- Report dizziness on standing to their doctor as this may indicate orthostatic hypotension.
- Consider aids such as hip protectors.
- Seek advice and tips from rehabilitation experts (for example, physiotherapist, exercise physiologist).

Swallowing problems

Swallowing changes are usually gradual. However, assessment by a speech pathologist is essential if frequent coughing or spluttering occurs.

Correct posture is vital for safe swallowing. A straight back (if possible) and a slightly forward head position is the safest option.

Tips to try:

- · Avoid dual tasking such as eating and talking or reading.
- Chew and swallow each mouthful before taking the next.
- If needed, swallow a second time.



- · Consider fluid thickeners.
- Speech therapy programs can improve swallowing.

Aids and equipment

A physiotherapist or occupational therapist can assess if a walking aid is required and recommend appropriate equipment such as a walking frame.

An occupational therapist can assess the safety of the home environment. Appropriate chairs, equipment and rails will help to maintain independence and safety.

Additional reading and resources

- Dementia Australia has developed a suite of help sheets about Lewy body disease
 - Visit: dementia.org.au/help-sheets
- Dementia Australia library service
 - Visit: dementia.org.au/library
- Dementia Australia support
 - Visit: dementia.org.au/support
- · Parkinson's Australia
 - Visit: **parkinsons.org.au**

Further information

Dementia Australia offers support, information, education and counselling.

National Dementia Helpline: 1800 100 500

For language assistance: 131 450

Visit our website: dementia.org.au