

Cognitive (thinking) changes in Lewy body disease

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

- Lewy body disease is a common 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 cognitive abilities (when someone's thinking is affected).

Cognitive functions

Cognitive functions are the thinking functions of the brain, including:

- executive function (working memory, planning)
- attention (concentration)
- memory
- visuospatial performance (judging distance or speed when driving)
- language (fluency and clarity in speaking and writing, finding the right word to use).

Changes in cognitive function can significantly affect a person's ability to carry out daily activities at home, at work or socially. It can also affect a person's interactions, thinking, perception and planning.

Some common cognitive changes are described below.

Executive function

If someone's executive function (working memory and planning) is impaired, it can affect their ability to:

- be logical and flexible
- make judgements and decisions
- plan, organise and carry out day-to-day activities
- slow down thought processes and reaction times.

The person may:

- seem like they have not heard you
- take a long time to answer
- seem anxious or compulsive about routines, or changes to routines.

Attention

If someone's attention is impaired, it can affect their ability to:

- be alert and reactive to new or changing situations
- concentrate
- multi-task
- cope in noisy places
- drive safely.

Visuospatial ability

If someone's visuospatial ability (visual perception) is impaired, it can affect their ability to:

- understand the concepts of depth and space
- judge distances
- move around confidently (increasing the risk of falls)
- drive safely
- see food on a plate
- mend something that is broken.

Memory

There are different types of memory.

- Working memory is used to process information from moment to moment.
- Implicit memory is long-term information you remember unconsciously or automatically. It's associated with habits and skills acquired over a lifetime, like riding a bike or recalling words to a song.
- Explicit memory is long-term memory for events, experiences and knowledge.

Many people living with Lewy body disease can:

- learn and store new memories
- retain long-term memories for habits and skills, however the ability to perform the habit or skill may be affected
- retain long-term memories for events, experiences and knowledge
- recognise and relate to family and friends well into the course of the condition.

People living with Lewy body disease can have ongoing or periodic insight into their situation and their choices. However, many will also struggle with storing new memories.

Changing ability

People living with Lewy body disease can have what is known as cognitive fluctuations, which can impact their abilities and last for minutes, hours or days.

Tips for managing cognitive changes

Below are some tips and ideas about ways to manage your own symptoms or support someone impacted by cognitive changes in daily life.

Tasks

You may find evidence that tasks are left unfinished or disrupted.

- If significant changes in abilities are recognised, consider a medical assessment to rule out other factors.

- Develop strategies to support the enablement and completion of tasks.
- Nominate a trusted family member or friend to be ‘power of attorney’ for legal, financial and medical tasks, and decision-making.

Driving

A lack of confidence when driving, like managing roundabouts and busy intersections, can be an early sign of problems with attention, visuospatial ability and executive functions.

- Discuss driving concerns with your doctor and ask for a driving assessment.
- Consider how long driving is still possible and make plans for what happens when you cease driving.
- Investigate other modes of transport.

Outings

Crowds or noisy places may cause worry, lack of confidence and withdrawal.

When planning activities:

- Be flexible with arrangements.
- Organise meals with one or two people rather than a group.
- Select outings where you have some control over crowd and noise levels.

Relationships

There may be changes to the dynamic within a relationship. There may be changes in both conversation and non-verbal communication or gestures.

- Be patient and give one another time to understand information and respond.
- Speak directly, because irony and non-verbal gestures like raising eyebrows or shrugging are hard to understand.
- Involve one another in decision-making and life choices.

Activities

Hobbies and activities requiring hand-eye coordination may become more challenging because of visuospatial deficits, or the inability to plan and execute tasks.

- Accept that there some hobbies may become challenging to do.
- Find other activities to do together, or with a friend.
- Chat about news, current affairs and friends.

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