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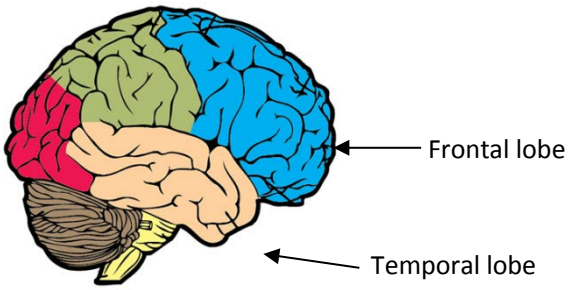
MND Australia Fact Sheet

Cognitive and behaviour change in MND

Introduction

In the past, it was thought that Motor Neurone Disease (MND) only affected the nerve cells (neurons) controlling the muscles that enable us to move, speak, breathe and swallow. However, it is now known that up to 50% of people with MND can experience changes in cognition, language, behaviour and personality.

When cognitive and behaviour changes occur in MND, it is because there have been changes in specific areas of the brain called the frontal and temporal lobes (shown right).



Most people experience relatively mild changes. However, a small proportion (5-15%) will show more significant changes and will receive a diagnosis of 'motor neurone disease with frontotemporal dementia' or MND/FTD. Often the symptoms of dementia precede the motor symptoms, sometimes by a number of years.

What do changes in cognition and behaviour look like?

When cognitive and behaviour changes are mild, they may not be noticeable or affect daily life. However, when changes are more pronounced, they can have a negative impact on a person's lifestyle and relationships. Cognitive and behaviour changes can often be a source of confusion and misunderstanding for the person with MND and their family.

While the nature of changes in cognition and behaviour will vary from person to person, some of the most common symptoms are listed below.

Changes in cognition can include difficulties with:

- concentration
- thinking quickly
- learning new things
- recalling information from memory
- reasoning and problem solving
- planning and organising
- awareness and insight into MND symptoms

Changes in behaviour or personality can include:

- rigidity – resistance to changing routine or attempting new activities
- impulsivity – doing or saying things without considering consequences
- irritability – experiencing a 'shorter fuse' or reacting with disproportionate anger to events
- disinhibition – difficulties in controlling behaviour or making social judgements, such as saying inappropriate things during social events
- apathy – reduced motivation and less interest in previously enjoyed activities
- difficulty understanding and expressing emotion. For example, difficulty in picking up on emotional cues and responding appropriately

Changes in language can include:

- unusual speech patterns, writing or spelling
- difficulty finding the right word in conversation
- taking longer to respond in conversations
- problems in understanding the meaning of words
- using odd words to get a message across
- repeating particular words or phrases over and over

Who can help?

If you or someone you know might be experiencing these symptoms, it is important to consult with a general practitioner (GP), neurologist or specialist MND clinic. Clinical neuropsychologists can also assist in diagnosing changes in cognition and behaviour, and can help the person and their family to develop practical strategies to manage symptoms.

Points to think about

- Many people with MND do not experience cognitive and behaviour change.
- Symptoms might be caused by factors other than changes in the brain (for example, depression or medication effects) so this needs investigating.
- Clinical neuropsychologists and neurologists can assess changes in cognition and behaviour with a view to helping you to develop practical strategies.
- If changes are noticed by the person with MND or others, supports are available to assist with management of these symptoms.

More information

For more information on cognitive and behaviour change in MND please contact your local MND Association or relevant health professional.

References

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To find out about motor neurone disease and other fact sheets in this series contact the MND Association in your state or territory
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