Mild cognitive impairment

This help sheet describes mild cognitive impairment (MCI), as well as its symptoms, progression and treatment.

About mild cognitive impairment

- Mild cognitive impairment (MCI) is a condition that causes a noticeable decline in memory and other cognitive (thinking) abilities.
- The changes to memory and thinking are greater than usually expected from someone at a similar age.
- The use of the word 'mild' in MCI does not mean that the person with MCI experiences only mild symptoms. These symptoms may be very concerning to them and their family.
- Most people remain able to carry out their daily activities.
- Some doctors may use the term 'mild neurocognitive disorder'.

Types of MCI and symptoms

The range of symptoms experienced by someone with MCI varies from person to person.

For many people, the changes are serious enough to be noticed by the person experiencing them and by family and close friends.

There are two major types of MCI:

- Amnestic MCI
  Amnestic MCI is the most common form and primarily includes subtle changes in memory and thinking. The person may forget important information that they had previously recalled easily, such as appointments, conversations or recent events.
- Non-amnestic MCI
  Non-amnestic MCI affects other cognitive abilities. The person may experience changes to thinking skills, such as difficulties with language, attention, decision-making and/or changes to their visual perception.

If you are experiencing any of these symptoms, talk to your doctor.

Diagnosing MCI

Diagnosing MCI may take some time, because doctors must eliminate other possible causes of symptoms such as depression, medication problems or having a nutritional deficiency.

The assessment might include:

- a detailed medical history
- blood and urine tests
- a physical assessment (to assess symptoms for other treatable disorders)
- neuropsychological tests (to assess cognitive function, memory, language, attention and other skills).

Other tests may be performed to assess abnormalities in the brain as a cause of symptoms. These may include:

- computerised tomography (CT) scan
- magnetic resonance imaging (MRI) scan
- positron emission tomography (PET) scan
- a lumbar puncture or spinal tap, measuring protein levels in cerebrospinal fluid (CSF).

Soon, blood tests are likely to be available.

Does MCI lead to dementia?

People with MCI have an increased risk of developing dementia.

Dementia is a condition that is caused by disorders affecting the brain. It can affect thinking, memory and behaviour. Brain function is affected enough to interfere with someone's normal social or working life.

Studies estimate that 10 to 15 per cent of people with MCI go on to develop dementia each year.[1,2]

The risk factors of MCI progressing to dementia include:

- older age
- more severe cognitive impairment (where changes to memory and thinking are impacting a person's daily life)
- 'biomarkers' from tests.

A substantial proportion of people diagnosed with MCI do not progress and have stable, or even improved cognitive function over time. A doctor or specialist may want to review symptoms over time, to monitor for any potential changes in symptoms and brain health. Experts recommend that people with MCI should ideally be reviewed by their doctor or specialist at between six and 12 months (but definitely within 18 months).[3]

Living with MCI

Knowing that MCI is the cause of symptoms confirms the person's concerns are valid and there is a medical reason for a decline in memory or other thinking skills.

A diagnosis can allow someone to develop strategies and evaluate support systems to:

- adjust to changes in memory and thinking skills
- create and maintain healthy habits to look after their brain and reduce the risk of developing dementia
- learn ways to help stay mentally and socially active and maximise wellbeing.

Knowing there is an increased risk of developing dementia also allows people to plan for the future and make important legal, financial and personal decisions, such as appointing powers of attorney.

Treatment options

No medical treatments have shown benefits in preventing MCI. An early diagnosis and making lifestyle changes can improve quality of life and slow cognitive decline.[1,2,3]

Examples of lifestyle changes are:

- Exercising regularly: for example, going for a walk. If the person is unable to exercise or is at risk of falls, request a doctor referral to an exercise physiologist.
- Eating well. The Mediterranean diet has been associated with a lower risk of progression from MCI to dementia. This diet includes lots of fruit, vegetables, legumes, fish, nuts and olive oil.[3]

- Stimulate the brain with activities such as learning a musical instrument, doing art or learning a new language.
- Be socially engaged: join groups or clubs, meet with family and friends regularly.
- Manage mental health: talk to the doctor to manage any signs of depression, anxiety or any other mental health conditions. Talking to a counsellor may assist people with MCI to find ways to adjust to changes to thinking and memory.
- Managing sleep: if the person has trouble sleeping, or is waking up tired, talk to the doctor.

Health conditions such as diabetes, high blood pressure or high cholesterol can contribute to cognitive decline. So it is important to treat these conditions effectively with the help of a doctor.

Ask the doctor about the use of Souvenaid, a nutritional supplement, as a treatment option.

Additional reading and resources

- Dementia Australia library service
  Visit: **dementia.org.au/library**
- Dementia Australia support
  Visit: **dementia.org.au/support**
- Dementia Australia education
  Visit: **dementia.org.au/education**

References

[1] Alzheimer's Association. 2022 Alzheimer's Disease Facts and Figures. Alzheimers Dement 2022;18. https://www.alz.org/media/Documents/alzheimers-facts-and-figures-special-report-2022.pdf

[2] RC Petersen, O Lopez, MJ Armstrong, TSD Getchius, M Ganguli, D Gloss, GS Gronseth, D Marson, T Pringsheim, GS Day, M Sager, J Stevens, A Rae-Grant. Practice guideline update summary: Mild cognitive impairment: Report of the Guideline Development, Dissemination, and Implementation Subcommittee of the American Academy of Neurology. 2018 Jan 16;90(3):126-135.

[3] M Woodward, H Brodaty, M McCabe, C L Master, S L Naismithe, P Morris, CC Rowe, P Walker and M Yates. Nationally Informed Recommendations on Approaching the Detection, Assessment, and Management of Mild Cognitive Impairment Journal of Alzheimer's Disease IOS Press 89(3) 2022, 803–809.

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