



Alzheimer's
Research
UK

What is mild cognitive impairment?



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Introduction

This booklet provides information about mild cognitive impairment. It's for anyone who wants to know more about the condition, or might be worried about their own or someone else's memory. We hope this background information is helpful.

The information here does not replace advice that doctors, pharmacists, or nurses may give you. If you are worried about your health, including memory and thinking problems, you should speak with your doctor as soon as possible.

The booklet was updated in November 2021 and is due to be reviewed in November 2023. It was written by Alzheimer's Research UK's Information Services team with input from lay and expert reviewers. Please get in touch using the contact details below if you'd like a version with references or in a different format.

If you have questions about dementia or dementia research you can contact the **Dementia Research Infoline** call **0300 111 5111** email infoline@alzheimersresearchuk.org
Or write to us using the address on the back page.

What is mild cognitive impairment?

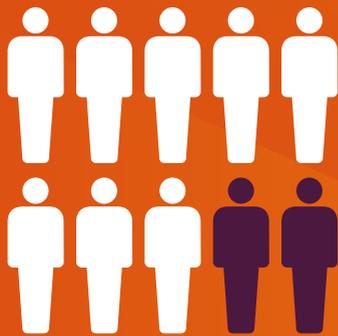
Mild cognitive impairment, also referred to as MCI describes memory and thinking problems that are mild, but still noticeable.

Mild- not severe

Cognitive- mental functions involved in thinking, planning, and understanding

Impairment- not working as well as it should

We may notice a natural decline in our memory and thinking as we get older. But for a person with MCI, memory and thinking problems are worse than we would expect for their age. Unlike dementia, these problems may not get in the way of a person's day-to-day life.



Research has suggested that **1-2 in 10** aged over 65 have MCI.

But because the condition isn't always diagnosed it is difficult to know exactly how many people are affected.



What causes mild cognitive impairment?

MCI can be caused by a range of conditions or existing health problems.

This means for some people with MCI their memory and thinking problems stay the same, and for others they may get worse over time. MCI does not necessarily lead to dementia because it can be caused by other conditions.

Causes of MCI:

- depression, stress, and anxiety
- vitamin deficiencies
- thyroid disorders
- autoimmune conditions
- infections
- side effects from medication
- sleep disorders like sleep apnoea
- early stages of Alzheimer's disease or another type of dementia.

It is important to know what it is causing a person's MCI; whether it is a symptom of a condition like those mentioned above, or the early stages of dementia.



What's the difference between MCI and dementia?

The word dementia describes a group of symptoms that can affect a person's ability to carry out daily activities.

It is caused by diseases, with Alzheimer's being the most common cause. Dementia symptoms include memory problems, confusion, communication difficulties and mood changes. A person with dementia will usually have at least two of these symptoms, which are noticeable and get worse over time.

In comparison to dementia, someone with MCI has mild symptoms and may not be affected in so many ways. This means someone with MCI is usually able to work, drive and manage day to day responsibilities safely and without support from other people. Whereas dementia gets in the way of everyday life.

Does MCI lead to dementia?

Research has found that having MCI raises your risk of developing dementia in the future, but this often depends on the underlying cause.

Every year, about 1 in 10 people who have been diagnosed with MCI develop dementia. For half of people with MCI, their symptoms do not get worse or get better. For those who do go on to develop dementia, the time this takes can vary from one person to another.

When MCI is caused by the early stages of Alzheimer's disease, vascular dementia or another type of dementia, symptoms will get worse over time and start to affect a person's ability to carry out daily activities. This worsening can be very gradual and not noticeable to begin with.



Symptoms

The symptoms of MCI do not normally affect daily life very much, but everyone's experience is different.

These symptoms may affect someone with MCI all of the time, or they might come and go. This will depend on the underlying cause. Anyone experiencing any changes to their health, including mild changes to their memory and thinking, should make an appointment with their doctor as soon as possible. Getting the right diagnosis is important.

Symptoms may include:



Memory

Misplacing items or having trouble remembering recent conversations



Attention

Finding it difficult to concentrate, e.g. while watching a TV programme or carrying out duties at work



Thinking skills

Problems with planning or completing tasks, e.g. managing money, or cooking a meal



Disorientation

Confusion about time, date or place



Communication

Problems finding the right words



Mood and behaviour

Becoming irritable, anxious, or low in mood

Diagnosis

Diagnosing MCI means you can get the right help and support. Identifying the cause of someone's MCI means the right treatment and management of the condition can be started.

With the correct diagnosis you may also be able to take part in research to test new treatments. Your doctor is the first person to see if you are worried about your memory or thinking.



When you visit your doctor, they should:

- ask how your symptoms are affecting you.
- if possible, talk to a loved one about how symptoms affect your daily life.
- give you a physical check-up testing movement and coordination, and reflexes.
- blood tests to look for vitamin deficiencies, thyroid disorders and to check overall health
- look over your medical history and any medications you take.
- do some tests with you, to check your memory and thinking skills.

Your doctor may find out that your symptoms are due to a health condition such as depression, anxiety, vitamin deficiency or thyroid problems. If this is the case, they will be able to provide the best course of treatment.

If these conditions have been ruled out the doctor can refer you to a memory clinic or other specialist clinic for further tests which help to find out the cause of someone's MCI.



A memory clinic or specialist can perform:

- a brain scan to look for signs of dementia
- further thinking and memory tests
- lumbar puncture to test spinal fluid for warning signs of Alzheimer's disease or another type of dementia.

Because Mild Cognitive Impairment affects people differently and has many causes, some people experience difficulties getting their symptoms diagnosed. This means it can take longer to get the right diagnosis. If you are struggling to get a diagnosis and are worried about your symptoms, you can speak with dementia specialist nurses on the **Admiral Nurse Helpline 0800 888 6678** or **helpline@dementiauk.org**

You can find more information about diagnosis of memory problems in our booklet **Problems with your memory?**, which you can request using the contact details on the back page of this booklet.

If you are diagnosed with MCI, your doctor can talk to you about the next steps. As people with MCI have a higher risk of developing dementia, you should arrange a follow-up visit to your doctor every year to see if your symptoms get worse over time. If you notice they do get worse, you can go to the doctor as soon as possible and ask for a referral back to the memory clinic for follow up tests.

Treatments

Currently in the UK, there are no specific treatments available to treat MCI. Two medicines available for Alzheimer's disease, called cholinesterase inhibitors and memantine, have not been shown to help people with MCI.

As some people with MCI may be in the early stages of a disease like Alzheimer's, researchers are keen to find out whether possible new treatments work in people with MCI. To find out more about taking part in clinical trials or other research studies, visit www.joindementiaresearch.nihr.ac.uk or call Alzheimer's Research UK's **Dementia Research Infoline** on **0300 111 5111**.

For people where the underlying cause of MCI is a treatable condition, like a thyroid disorder or vitamin deficiency, then their doctor will prescribe treatments to manage the condition. Some people find this can improve their symptoms. The doctor may also treat any other conditions such as diabetes or high blood pressure that could make symptoms of MCI worse.

Research is being carried out into non-drug treatments for MCI, such as memory training and computer based brain training. So far, the results have been mixed. Also being investigated are exercise and diet changes, which may reduce a person's risk of going on to develop dementia.

The doctor may be able to suggest practical tips to help you manage your symptoms, like keeping a calendar or diary. They might also suggest ways to keep physically and mentally active, such as taking regular exercise which is important to keep our brains healthy.

Risk factors for MCI

Risk factors are things that change our likelihood of developing a disease.

Factors that may increase our chances of developing MCI include age, genetics, lifestyle, and other health conditions like high blood pressure, high cholesterol, diabetes, obesity, and stroke. These risk factors are also the same for the development of dementia. While there is no sure-fire way to prevent MCI, there are steps we can take to keep our brains as healthy as possible. These can help reduce the risk of MCI and dementia too.

These include:



Not smoking



Controlling
blood pressure



Keeping blood
sugar levels in
check



Eating
a healthy
balanced diet



Keep cholesterol
at a healthy
level



Limiting the
amount of
alcohol we
drink



Keep physically
and mentally
active

Further information about the risk factors for dementia can be found in our booklet '**Reducing your risk of dementia**', which you can request using the contact details on the back page of this booklet.

Support

There is help and support available for those worried about or affected by MCI or dementia.

If you have questions about MCI or dementia, symptoms, diagnosis, treatment, or about taking part in research you can contact Alzheimer's Research UK's **Dementia Research Infoline** on **0300 111 5111** or **infoline@alzheimersresearchuk.org**

The **Admiral Nurse Helpline** offers practical and medical advice and emotional support to people affected by MCI and dementia **0800 888 6678** or email **helpline@dementiauk.org**

Alzheimer's Society provides information about dementia care, and support for people affected by dementia in England, Wales and Northern Ireland. Call **0333 150 3456** or email **dementia.connect@alzheimers.org.uk**

Alzheimer Scotland provides advice, support, and information on local services in Scotland for people affected by dementia. Call **0808 808 3000** or email **helpline@alzscot.org**



0300 111 5 111



Research

Thanks to the generosity of our supporters, we will fund many more pioneering studies into MCI and dementia.

Research is underway to understand the risk factors for MCI as well as identifying those with the condition who are most likely to go on to develop dementia.

One study will use innovative brain scanning techniques to compare the brain scans of different groups of people. By comparing people with no dementia to people with MCI and with Alzheimer's disease, researchers hope to discover more about how Alzheimer's progresses and develop a timeline of the changes that take place in the brains of people with the disease.

Through research we'll bring about breakthroughs that will change lives, but scientists need your help. People with and without dementia, including people with MCI can take part in dementia research. You can register to take part at www.joindementiaresearch.nihr.ac.uk or call **0300 111 5111**.

Alzheimer's Research UK is the UK's leading dementia research charity dedicated to making life-changing breakthroughs in diagnosis, prevention, treatment and cure.

We provide free dementia health information, like this booklet and others. If you would like to view, download or order any of our other booklets please details below.

Contact us

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Visit

www.alzheimersresearchuk.org/dementia-information

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