

Mild Cognitive Impairment (MCI)

Mild cognitive impairment (MCI) causes a slight but noticeable and measurable decline in memory or other thinking skills, also known as cognitive abilities. These changes are serious enough to be noticed by the individuals experiencing them and by their close friends and family but generally are not severe enough to interfere with daily life or independent function.

Because the changes caused by MCI are not severe enough to affect daily life, a person with MCI does not meet diagnostic guidelines for dementia. However, those with MCI have an increased risk of eventually developing Alzheimer's or another type of dementia. Long-term studies in large groups of older adults suggest that 10 to 20 percent of those aged 65 and older may have MCI.

Symptoms

Experts classify MCI based on the thinking skills affected. MCI that primarily affects memory is known as “amnesic MCI” after the Greek word for “forgetfulness.” MCI that chiefly affects thinking skills other than memory is known as “nonamnesic MCI.” Research suggests that amnesic MCI is about twice as common as the nonamnesic type. MCI that affects more than one thinking skill is known as “multiple domain MCI.”

Everyone experiences occasional memory lapses, including some that seem serious or embarrassing, and nearly everyone feels as if these lapses grow more frequent with age. It's common for older adults to have trouble remembering the right word or recalling a name and then remember it later.

With amnesic MCI, a person may start to forget important information that he or she would previously have recalled easily, such as appointments, conversations or recent events.

Thinking skills that may be affected by nonamnesic MCI include the ability to make sound decisions, judge the time or sequence of steps needed to complete a complex task, or visual perception.

Diagnosis

MCI is a “clinical” diagnosis representing a doctor's best professional judgment about the reason for a person's symptoms. There are currently no tests or procedures to demonstrate conclusively that a person has MCI. It's also not yet possible to determine the underlying cause of MCI in a specific person.

A medical workup for MCI includes:

- **A thorough medical history**, documents current symptoms, previous illnesses and other medical conditions, and family health/history of significant memory problems or dementia.
- **Assessment of independent function and daily activities**, focusing on changes from a person's usual level of function.

- **Input from a family member or trusted friend** provides additional perspective on how function may have changed.
- **Assessment of mental status** uses brief tests designed to evaluate memory, planning, judgment, ability to understand visual information and other key thinking skills.
- **In-office neurological examination** assesses the function of nerves and reflexes, movement, coordination, balance and senses.
- **Evaluation of mood** can detect depression, a disorder whose symptoms may include problems with memory or feeling “foggy.” Depression is widespread and may be especially common in older adults.
- **Laboratory tests** include blood tests and imaging of the brain’s structure.

If the workup doesn’t create a clear clinical picture, the doctor may recommend neuropsychological testing, which involves a series of written or computerized tests to evaluate specific thinking skills.

Causes and Risk Factors

The causes of MCI are not yet completely understood. Experts believe that many cases — but not all — result from brain changes occurring in the very early stages of Alzheimer’s disease or other dementias.

The risk factors most strongly linked to MCI are the same as those for dementia: advancing age, family history of Alzheimer’s or another dementia, and conditions that raise risk for cardiovascular disease.

Outcomes

MCI increases the risk of later developing dementia, but some people with MCI never get worse. Others with MCI later have test results that return to normal for their age and education. It’s not yet possible to tell for certain what the outcome of MCI will be for a specific person or to determine the underlying cause of MCI from a person’s symptoms. In the future, researchers hope to increase the power to predict MCI outcomes by developing new diagnostic tools to identify and measure underlying brain changes linked to specific types of dementia.

Treatment

No medications are currently approved by the U.S. Food and Drug Administration (FDA) to treat MCI. Drugs approved to treat symptoms of Alzheimer’s disease have not shown any benefit in delaying or preventing progression of MCI to dementia.

The following coping strategies may be helpful for those with MCI. Some studies suggest that these strategies may help slow decline in thinking skills, although more research is needed to confirm their effect. But they pose little risk, and may offer other health benefits and enhance one’s sense of well-being, so they’re a reasonable part of anyone’s overall wellness plan:

- **Exercise** on a regular basis to benefit your heart and blood vessels, including those that nourish your brain.
- **Control cardiovascular risk factors** to protect your heart and blood vessels, including those that support brain function.
- **Participate in mentally stimulating and socially engaging activities**, which may help sustain brain function.

Experts recommend that a person diagnosed with MCI be re-evaluated every six months to determine if symptoms are staying the same, improving or growing worse.

Learn More

For more information about MCI, Alzheimer's or other types of dementia, caregiving, legal issues or clinical trial participation, visit www.alz.org or call our toll-free, 24/7 Helpline at 800.272.3900.

The Alzheimer's Association is the world's leading voluntary health organization in Alzheimer's care, support and research.