

What is Alzheimer's disease?

Alzheimer's disease (AD) is a brain disease that causes damage to and destruction of nerve cells. It is the most common cause of dementia, which is a decline in thinking that interferes with one's everyday functions.

A person with AD has difficulty:

- Remembering
- Solving problems
- Communicating

A person with AD may also have changes in:

- Personality
- Mood
- Behavior

AD slowly worsens over time. It is believed that more than 5 million Americans over the age of 65 and at least 200,000 people in America under the age of 65 have the disease.

What are the causes of Alzheimer's disease?

In AD, the brain contains abnormal protein deposits that form plaques (beta-amyloid protein) and tangles (tau protein) around and within nerve cells. The abnormal proteins interfere with the normal function of nerve cells and eventually result in nerve cell death.

We now know that the changes in the brain that cause AD begin at least 20 years before a person develops symptoms of the disease.

There is no known single cause of AD. However, scientists have learned a great deal about what factors may increase a person's risk of developing AD. The single most important risk factor for developing AD is getting older. The likelihood of developing AD doubles every 5 years after age 65. Additional factors that influence the risk of developing AD include:

- Family history
- Certain genes
- Other health conditions such as diabetes
- Diet
- Exercise practices
- Education

What are the symptoms of Alzheimer’s disease?

AD is often described in “stages”. Different symptoms mark the different stages of AD, though this varies from person to person. Progression from stage to stage is gradual.

Early stage

AD begins gradually and may, at first, be difficult to recognize.

Commonly described difficulties include trouble with the following tasks:

- Remembering recent events
- Keeping track of time
- Naming familiar people or things
- Solving problems
- Planning
- Learning new things

Middle stage

Memory loss progresses and people find it more difficult to:

- Read
- Write
- Speak
- Perform household tasks
- Choose clothing
- Bathe without reminders

Late stage

A person with advanced AD is often unable to:

- Communicate
- Recognize people, places, or objects
- Walk

They may sleep most of the time and often need full-time care.

How is Alzheimer's disease diagnosed?

No single test leads to a diagnosis of AD. Rather, a diagnosis is made after a complete evaluation that includes:

- A detailed history and physical exam, including information from family members or others who the person spends a lot of time with
- Tests to evaluate memory and thinking
- Blood tests, brain scans, and in some cases spinal fluid testing

What are the prognosis and options for treatment?

There is no known cure for AD. The duration of the disease can vary from a few years to more than 20, though most people with the disease die approximately 8-10 years after being diagnosed.

There are five different prescription drugs used to treat AD:

- Donepezil (Aricept®)
- Galantamine (Razadyne®)
- Rivastigmine (Exelon®)
- Memantine (Namenda®)
- A combination drug called Namzaric®

Where can I learn more?

More information about AD can be found at:

- The Alzheimer's Association
www.alz.org or by calling (800) 272-3900
- The National Institute on Aging
www.nia.nih.gov or by calling (800) 438-4380

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