

Alzheimer's Disease



University of Michigan
Health System

Michigan Alzheimer's Disease Research Center

Alzheimer's Disease

(AD) damages and destroys brain cells. It is a disease that slowly gets worse over time. It impairs a person's ability to remember, think and communicate. AD can also cause changes in personality and behavior such as anxiety, depression and agitation. AD is the most common cause of dementia in older people and it is now believed that as many as 4.5 million Americans suffer from the disease.

CAUSE

In AD, the brain contains abnormal protein deposits that form plaques and tangles around and within nerve cells. There is no known single cause of AD. However, scientists have learned a great deal in the past 15 years about what factors may increase a person's risk of developing AD. Increasing age is the most common risk factor for AD. The likelihood of developing AD doubles every 5 years after age 65.

Additional factors may include:

- family history;
- factors related to stroke and heart attacks such as high blood pressure and high cholesterol;
- lifestyle choices such as diet, exercise and education.

More research is needed to better understand how these factors affect a person's risk of getting AD.

SYMPTOMS

AD is often described in "stages." Different symptoms mark the different stages of AD.

Early-Stage: Alzheimer's begins slowly. At first, people may have trouble remembering recent events, activities, or the names of familiar people or things. They may also have trouble solving simple math problems.

Middle-Stage: People in this stage have trouble thinking clearly. It may become difficult for them to perform daily activities such as brushing their

teeth or combing their hair. They may also begin to have problems speaking, reading and writing.

Late-Stage: Late in the disease, people with AD are unable to communicate or recognize people, places or objects. They may sleep most of the time and often need total care.

DIAGNOSIS

Because there is not one single test for AD, a diagnosis is usually made after a thorough medical history, discussion of symptoms, physical examination, and memory and cognitive testing. Brain scans and blood tests are often performed. Seeking a diagnosis early in the course of the disease can help patients and their families plan for the future. It also gives patients the best chance to start treatment early. A skilled doctor can usually diagnose AD correctly about 90 percent of the time. A definite diagnosis is still only possible after death with a brain autopsy.

PROGNOSIS AND TREATMENT

There is no known cure for AD. Most people with the disease die approximately 8 years after being diagnosed. However, the duration of the disease can vary from a few years to more than 20. There are four different drugs commonly used to treat AD -- Aricept, Exelon, Razadyne (generic name is Galantamine), and Namenda. These medications are helpful in treating the symptoms of AD. Doctors can also

prescribe medications to help with common behavioral or emotional symptoms of AD. A doctor or his/her staff may make suggestions regarding lifestyle changes for the person with AD and their family, which may improve their comfort and safety.

HOPE FOR THE FUTURE

Considerable progress has been made in Alzheimer's research over the last several years. Researchers now know

much more about how AD affects the brain. While current drugs primarily treat the symptoms of AD, many researchers are now exploring the development of a new generation of treatments that may prevent, slow or even reverse the damage caused by AD.

RESOURCES

More information about Alzheimer's disease can be found at:
www.alz.org
www.alzheimers.org