

What You Should Know About Alzheimer's Disease

Which woman hasn't worried that she is developing Alzheimer's disease? When you forget where you put your keys, or walk into a room and can't remember why you're there, you may think, "Uh oh, I have Alzheimer's!" But there is more to this chronic (long-lasting), progressive (gets worse as time goes on) disease than the simple memory loss we all experience.

Defining Alzheimer's Disease

Alzheimer's disease is a type of dementia. Dementia is a general term for a group of symptoms that include loss of memory, judgment, reasoning, and language to such an extent that it prevents a person from performing normal everyday activities. People with dementia, including Alzheimer's disease, exhibit unusual behavior such as asking the same question over and over again; getting lost in places they know well; not recognizing friends and family members; or forgetting to bathe, eat, or dress themselves. About 4 million Americans are now living with Alzheimer's disease; it is the main cause of dementia in people over age 65 years. Since the likelihood of developing Alzheimer's disease increases with age, this number is expected to rise as the U.S. population ages. There are more older women in the population and for this reason, Alzheimer's disease affects women more often than men.

Alzheimer's disease is not the only

cause of dementia. Other problems, such as medication reactions, an underactive thyroid, depression, a brain tumor, or a blockage of blood vessels in the brain can cause similar memory loss and unusual behavior. Unlike Alzheimer's disease, some of these conditions can be cured or treated, so it is important to get an accurate diagnosis. To do this, the health care provider takes a careful medical history, conducts mental tests to check ability to remember, solve problems, pay attention, and follow directions; does blood tests to check for other possible causes; and sometimes orders special scans to look at pictures of the brain. If the behavior fits the definition of Alzheimer's disease and no other cause can be found, a diagnosis of possible or probable Alzheimer's disease is made.

About half the people with Alzheimer's disease are cared for at home, usually by women. The cost of caring for a loved one with this condition can be high—in addition to financial expenses, there is the emotional and physical challenge of watching a parent, spouse, or relative get progressively worse.

What's Going on in the Brain

As we get older, various changes in the brain make it a bit more difficult to learn and perform complicated tasks.

Ordinarily, this poses no problem, although older women may take a little more time to recall names, learn new things, and perform tasks. In addition, deposits of protein and cellular material called plaques, and twisted fibers called tangles build up in and around nerve cells. Free radicals—oxygen molecules that combine easily with other molecules, causing damage to cells—build up in the brain as well. While these things happen to a small degree as we age, some scientists think they happen more quickly and affect more brain tissue in people with Alzheimer's disease. No one knows what starts this disease process.

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With Alzheimer's disease, the rapidity and extent of these changes affects the way the brain works. Some people with the disease lose their abilities over a short period of time. Others are able to function for many years. No matter how fast or slow the process, most people with Alzheimer's follow a pattern:

This Patient Handout was prepared by Diane E. Judge, APN/CNP, using materials from the Alzheimer's Disease Education and Referral (ADEAR) Center (<http://www.alzheimers.org>).

Alzheimer's Disease

Preclinical Alzheimer's.—The parts of the brain responsible for long and short-term memory begin to shrink, causing memory loss.

Mild Alzheimer's.—At this stage, there is damage to areas in the brain responsible for memory, reasoning, and language. Although the person with the condition still may look healthy, she or he begins to become confused in familiar places, takes longer to do usual tasks, has trouble handling money, exhibits poor judgment, has mood and personality changes, and becomes anxious for no apparent reason. It is often during this stage that family members notice a problem.

Moderate Alzheimer's.—The brain damage extends to areas responsible for conscious thought and sensory processing. In this stage, people begin to show behavioral problems such as wandering, undressing at inappropriate times, having emotional outbursts, and being unable to recognize family members.

Severe Alzheimer's.—Damage extends throughout the brain and harms physical well-being as well. People in this stage lose weight, sleep for long periods of time, and may lose the ability to swallow, maintain control of their bowels and bladder, or care for themselves in any way.

Preventing Alzheimer's Disease

Because Alzheimer's disease is so common and so devastating, a great deal of time and money has been devoted to research on preventing or treating it. At one time, researchers thought that taking hormones (either estrogen alone or estrogen with a progestin) after menopause might decrease the likelihood of women developing the condition. However, a recent study suggests this may not be the case. Women should not take postmenopausal hormones to try to prevent Alzheimer's disease. Women who take postmenopausal hormones are not less likely to develop Alzheimer's disease.

Researchers have identified some genes that are related to early Alzheimer's disease—which develops in people under age 65 years—and others that are related to the disease in older people. In the future, they may be able to use this knowledge to prevent, delay, or treat the disease. Aspirin-like drugs, Vitamin E, various other vitamins, cholesterol-lowering drugs, and the herb ginkgo biloba are other treatments being studied; however, there is no clear evidence yet that these work. Other avenues of research include finding ways to decrease the plaques and tangles or free radicals in the brain.

Treating Alzheimer's Disease

There is currently no way to stop the progressive brain damage. However, you may have read or heard about some new medications for Alzheimer's disease. Four of them, in a category called cholinesterase inhibitors, help some people in the mild to moderate stages. When they work, they slow down the development of some symptoms and may control some behavioral problems. However, these medications eventually lose their effectiveness over time.

A fifth drug, which works differently than the cholinesterase inhibitors, is sometimes used to treat moderate to severe Alzheimer's and may help prolong patients' ability to perform some functions, such as going to the bathroom. Because it works differently, it may be prescribed along with a cholinesterase inhibitor. Both types of drugs are prescribed at low doses and gradually increased as long as they seem to be working. As with all medications, these drugs can have side effects, such as nausea, vomiting, diarrhea, dizziness, headache, or constipation.

Caring for Someone With Alzheimer's Disease

Being a caregiver for someone with Alzheimer's disease can be challenging,

Resources

Alzheimer's Association

225 North Michigan Ave.
Suite 1700
Chicago, IL 60601
www.alz.org

Alzheimer's Disease Education and Referral (ADEAR) Center

PO Box 8250
Silver Spring, MD 20907
1-800-438-4380
<http://www.alzheimers.org>

Eldercare Locator

1-800-677-1116
www.eldercare.gov

National Institute on Aging

PO Box 8057
Gaithersburg, MD 20898-8057
1-800-222-2225
1-800-222-4225 (TTY)
www.nia.nih.gov

overwhelming, and heartbreaking. It is difficult to watch a parent, spouse, or relative who was once physically and emotionally strong become weak and unable to care for herself. Even if you are not the caretaker, you may be the one who recognizes that a parent or spouse is showing signs of dementia. It is difficult to be responsible for persuading a loved one to seek a diagnosis and medical care for unusual behavior, or ensuring that they give up symbols of independence, such as driving a car or living alone. If you are a caregiver, friend, or relative of someone with Alzheimer's disease, you may want to take advantage of the informational sources and support groups in your own community, which are often available from hospitals and senior services. The resources listed above can both provide you with general information and direct you to local programs and services, and keep you up to date on research projects and their results.