

## Depression may be another risk for Alzheimer's dementia: Your doctor can help

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### Depression and AD

Both depression and Alzheimer's disease (AD) are common in the elderly. Both need early diagnosis because both are best treated in early stages. AD is a disease that slowly attacks the brain. It causes problems with thinking and especially memory. Changes in personality and mood, including depression, are common in people with AD. More information about AD can be found on the next page.

Depression is a medical illness that is often overlooked but is very treatable. Symptoms may include changes in eating and/or sleeping patterns, feeling tired, losing interest in doing things, feeling sad, or having difficulty concentrating. Risk factors include a family history of depression, stressful life events, and lack of social support. The elderly are particularly prone to depression due to significant losses. These may include declining health, death of family members and friends, retirement, and loss of independence.

Are the symptoms of depression and AD linked? A recent study suggests that depressive symptoms may in fact be a risk factor for AD. In this issue of *Neurology*, Wilson and colleagues (Wilson RS, Barnes LL, Mendes de Leon CF, et al. Depressive symptoms, cognitive decline, and risk of AD in older persons. *Neurology* 2002;59) present results of their study. More than 650 elderly (65 years or older) Catholic clergy members without clinical signs of AD took part in the study. The number of depressive symptoms at the start of the

### Table Warnings signs of depression

The following sample of questions help to find out if a person is depressed:

1. Trouble sleeping or sleeping too much
2. Poor appetite or overeating
3. No interest or fun doing things
4. No energy to do things
5. Feeling lonely
6. Feeling sad or hopeless

study was tested with a 10-item questionnaire. Memory, concentration, vocabulary, and other thinking processes were also tested. Over the following 7 years, people in the study had yearly clinical examinations to see if they were developing AD.

At the first visit, people in the study reported having, on average, about one depressive symptom. Only 1% of these people were considered to have severe depression, reporting more than 4 symptoms on the 10-item scale, at the beginning of the study. During the 7 years of follow-up, 108 of 651 persons developed AD. People with the most decline in thinking functions were diagnosed with AD. Of interest, these people also had reported the most depressive symptoms at the start of the study. It appeared that people with the largest number of depressive symptoms also had the greatest risk for developing AD. With each additional depressive symptom, the risk for AD increased by about 20%. In addition, people with more depressive symptoms developed problems with certain types of thinking skills earlier. These included problems with

short-term memory and visuospatial ability (for example, skills needed to find your way home). These results raise the possibility that depressive symptoms in older persons may be associated with an increased risk for developing AD.

One could ask whether depression predicts AD because the person is aware that he or she is having problems thinking and is consequently depressed. This study proves that unlikely because people with the most symptoms of depression did not have severe memory and thinking problems at the start of the study, but developed them later. However, this research could not prove that people with severe depression (more than 4 depressive symptoms on the 10-item scale used) would go on to develop AD because so few people had severe depression at the start of the study. Depressive symptoms were only tested at the start of the study. Because of this, some people could have had depression in the past or could have developed it during the 7-year follow-up period. It was impossible for the researchers to know what effect either of these situations might have on developing AD.

At this time it is not known whether treating depressive symptoms before the onset of AD would help to prevent or delay the disease. However, many patients with AD have a good response when treated for depression, using medications as well as modifying their environment. Education of caregivers to be alert to early signs of depression and AD is key to providing the best care. Clearly, more research is needed to answer these questions, especially regarding prevention.

## About Alzheimer's Disease

*What is Alzheimer's disease? AD is a disease that attacks the brain and alters lives. A steady loss of memory is a key feature. Problems with language and changes in behavior are common. The decline may continue from 5 to 20 years. At some point, a person with AD will need help with daily tasks such as eating, grooming, and proper hygiene. Because the impact on the person is so great, family and caregivers are also drastically affected.*

*About 4 million Americans have AD. It is estimated that 360,000 new cases occur each year. This number will probably increase as the population ages because AGE is the major risk factor. AD is the fourth leading cause of death for adults. It kills more than 100,000 Americans each year.*

## What are the Symptoms?

Loss of recent memories is usually the earliest warning. For instance, the person will repeat stories in the same conversation. Other features include:

- misplacing belongings
- difficulty doing familiar tasks
- increasing confusion and disorientation to time and place
- trouble finding words, not following conversations
- changes in mood or behavior
- changes in personality
- poor or decreased judgment
- loss of initiative

## Know the Warning Signs

Unfortunately, in early stages, many people fail to recognize that something is wrong. They may assume that such behavior is a normal part of getting older. It is not. Symptoms may develop gradually and go unnoticed for a long time. Sometimes families do not act even when they suspect something is wrong. The key

is early diagnosis. It is critical to see a doctor when you recognize or suspect AD symptoms.

## How is Alzheimer's Disease Diagnosed?

When AD is suspected, it is important to have a complete medical and neurologic work up. The purpose of this evaluation is to uncover other causes of dementia that must be treated in very specific ways. This may include:

- a complete health history and physical examination
- screening for depression
- neurologic and mental status testing
- blood and urine tests
- computerized tomography scan (CAT) or magnetic resonance imaging

## What Causes Alzheimer's Disease?

The cause of AD is not fully known. It is not contagious. Aging and inherited or genetic factors seem to play an important role. The most common form of AD does not run in families.

## What are the Treatments?

Although there is currently no cure for AD, there are treatments that may help.

**Treat memory symptoms.** The cognitive symptoms of AD should be treated as early as possible to slow the progression of the disease. Drugs called cholinesterase inhibitors may be considered in patients with mild to moderate disease. Vitamin E may also slow the progression, but should only be used if prescribed by the doctor.

**Treat behavioral problems.** Suspiciousness, aggression, or resistance to care may be treated first by understanding what triggers these behaviors. Caregivers may learn how to change things in the environ-

ment to improve cooperation. Some examples include providing low lighting and music to improve eating behaviors, taking regular walks, scheduling toileting, and following consistent routines. Certain medications may also help, including drugs to treat depression.

**Caregivers need caring too.** Caregiver training programs to learn more about the disease and how to manage it help delay the time to nursing home placement. Support systems (adult day care, computer support networks, telephone support programs, and other respite programs) may also help.

## Prevention

Although there is no known way to prevent AD, researchers believe there are several things that will help keep your brain healthy:

**Avoid harmful substances**—excessive drinking and drug abuse are thought to damage brain cells.

**Challenge yourself**—read frequently, do crossword puzzles. Keep mentally active. Learn new skills. This strengthens the brain connections and promotes new ones.

**Exercise regularly**—even low-moderate level activity such as walking or gardening 3 to 5 times per week can make you feel better.

**Stay socially active**—family, friends, church, and a sense of community may all contribute to better brain health.

## Caregiver Health

Families and friends can help by recognizing that AD impacts not only the patient, but also the primary caregiver. To take the best care of the patient with AD, the primary caregiver must take care of himself or herself. They should be encouraged to learn more about the disease, avoid isolation, and seek support from family, friends, and professionals.