

Alzheimer's Disease

Fact Sheet No. 10.233

Consumer Series | Family

by C.E. Barber, D. Martin and C.A. Fruhauf*

When a person's daily functioning is adversely affected by cognitive losses in the areas of thinking, remembering and reasoning, the person is said to have "dementia." Dementia itself is not representative of normal aging, nor does it refer to a single disease. Rather, dementia is a broad term that refers to a group of diseases. Some are reversible (secondary dementias) and others are irreversible (primary dementias).

Alzheimer's Disease (AD) is the most common form of primary dementia, accounting for 50-80 percent of all dementia. Other primary dementias include Multi-Infarct Dementia (MIS), Parkinson's Disease and Huntington's Disease.

Symptoms

Although the signs of AD vary considerably, there are some common symptoms. The primary one is gradual loss of memory. Other symptoms include a loss in the ability to perform routine tasks, disorientation in time and space, personality change (sometimes involving displays of aggressive behavior), difficulty in learning, and loss of language and communication skills. AD victims eventually reach the point where they can no longer care for themselves.

Causes

While there are many theories and speculations on the causes of AD, at present there is no known cause. It is possible that there are several causes, some inherited and some not. Stress, environmental toxins, immunological dysfunctions, and slow-acting viruses all have been identified as possible causes.

*C. E. Barber, former Colorado State University professor, human development and family studies; D. Martin, former Extension assistant director, consumer and family education; reviewed by C.A. Fruhauf, associate professor, human development and family studies. 9/2013

Diagnosis

Because many dementias have similar symptoms, not all people with AD symptoms actually have AD. It is important that an individual suspected of having AD undergo a complete examination by a physician (or a team of physicians) experienced in diagnosing dementias.

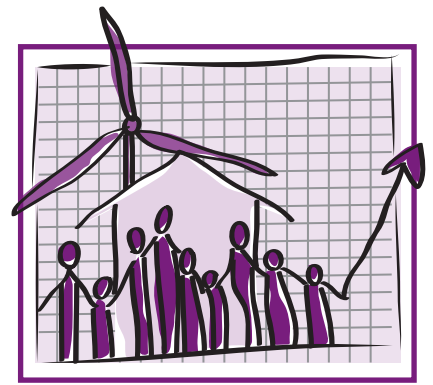
The process of diagnosis is one of elimination. Tests are conducted to rule out a variety of other causes and types of dementia (e.g., dementia due to certain tumors or infections in the brain, stroke, Vitamin B₁₂ deficiency, interaction of prescription and over the counter drugs, stress and emotional depression, chronic alcoholism, etc.). If all other causes and types of dementia are ruled out, the probability is high that the individual is afflicted with AD.

Diagnosis should include a complete health history, a thorough physical examination, neurological and mental status assessments (e.g., the Mini Mental Status Exam), blood studies, urinalysis, electrocardiogram and chest x-rays. Other procedures often recommended include computerized tomography (CT scan), electroencephalography (EEG), removal from medication, formal psychiatric assessment and neuropsychological testing.

While these procedures may provide a clinical diagnosis of AD, the only accurate confirmation of the disease is an examination of brain tissue during an autopsy performed after death. An autopsy performed on an individual afflicted with AD usually shows two abnormal formations in the brain: neuritic plaques containing excessive amounts of the beta-amyloid protein, and neurofibrillary tangles (twisted fibers of nerve cells).

Economics and Incidence

The financing of AD—including costs of diagnosis, treatment, nursing home care, informal care and lost wages—is estimated to



Quick Facts

- Alzheimer's Disease (AD) is the most common form of primary dementia.
- The primary sign of AD is gradual loss of memory.
- People who suspect they might have AD should undergo a complete examination by a physician experienced in dementias.
- AD will affect a person's food intake, preferences and appetite.
- The best way to cope with wandering is prevention. Caregivers should know which places appear safe but may be hazardous.

© Colorado State University Extension. 10/93. Revised 9/13.

www.ext.colostate.edu



be more than \$216 billion annually. Further, Medicare costs related to AD equals \$107 billion annually.

Although accurate data are difficult to obtain, it is estimated that AD afflicts more than 5 million Americans. Approximately, 1 in 3 older adults dies with AD or a dementia making AD the 6th leading cause of death in the United States. In 2010, there were 72,000 cases of AD in Colorado. The percentage of adults with AD increases with age. It is estimated that 6 to 10 percent of Americans 65+ have AD, 10 to 20 percent of those 75+, and 20 to 45 percent of those 85+.

Care and Assistance

AD affects patients' food intake, preferences and appetite. They may develop a craving for sweets, as they have a changed sensitivity to salty or sweet tastes (usually less sensitive). They experience changes in sense of smell. Changes in memory, judgment and decision-making make shopping, cooking and storing food more difficult and slower. They may eat spoiled foods or forget if they have eaten at all.

There is little conclusive evidence to support the restriction against using aluminum cookware or increasing Vitamin B supplements, choline, lecithin and megavitamins to improve memory.

To use the title from Mace and Rabins' well-known book on AD, caring for a person with AD is indeed a "36-hour day." Between 67 and 85 percent of AD victims are cared for outside institutional settings, usually in their own homes or in the homes of close family members. Caring for a victim of AD is frustrating, lonely and burdensome, with little hope for improvement in the AD patient.

For families who care for a loved one suffering from AD, remember the following points:

- Above all, take care of yourself so you are able to care for a loved one with AD.
- Surround yourself with support systems (i.e., family, friends, respite care, support groups for individuals caring for AD victims).
- Accept the fact that the patient's lost skills are gone for good.
- Remember, even small levels of excitement can upset the AD patient.
- Focus on what the AD patient can do.

- Remember, you must assume responsibility for guiding the conversation when an AD patient no longer can.
- Provide as much consistency and routine as possible, especially at bedtime. Provide a night light so that unfamiliar darkness will be less frightening.
- To reduce wandering, encourage physical activity, discourage naps and restrict evening intake of liquids.
- Remove yourself from the presence of the AD patient when he or she begins to demonstrate aggressive behavior.
- Remember that AD patients do not have extreme emotional reactions on purpose.
- Try to understand, accept and manage your own emotions to reduce irritating the AD patient.

Wandering

Researchers estimate that at least 60 percent of AD patients wander and are at risk of becoming lost. Some AD patients have driven hundreds and even thousands of miles from their homes. Others become disoriented while traveling out of town or around the local mall. Many AD patients are not able to ask for assistance when they become lost. Wandering behavior can be extremely frightening to loved ones who feel responsible for the well-being of the AD patient.

Causes and Prevention of Wandering

Clinicians and researchers do not know the exact cause of wandering. They do speculate that restlessness might be due in part to lack of exercise, boredom, a change in the physical environment, stressful living conditions, or fear produced by delusions or hallucinations. Wandering behavior may be a product of trying to search for something familiar or reassuring.

Researchers claim it is nearly impossible to predict when a person afflicted with AD will wander from safe surroundings. However, it is important for caregivers to recognize that wandering is a common symptom of dementia, and can be potentially dangerous to victims of Alzheimer's Disease.

The best way to cope with wandering is prevention. Caregivers should recognize

Checklist to Control or Prevent Wandering

- Use safety gates across doors and on openings at the top and bottom of stairs. This helps keep the AD patient in a limited area where she or he can wander safely.
- Explore the possibility of installing electronic buzzers, chimes or other security alarms at all exits.
- Place locks on all doors and gates.
- Encourage movement and exercise. Allow the AD patient to walk around in a secured environment (e.g., a fenced yard) and make exercise part of the AD patient's daily routine.
- Set up a place in the home where the AD patient can safely wander, directed by lights, signs or familiar objects.
- Discourage naps and restrict the evening intake of liquids.

that many places that appear safe may be hazardous for an Alzheimer's patient. As a result, caregivers should carefully examine and evaluate all aspects of the AD patient's physical environment. Potential hazards for AD patients include swimming pools, steep stairways, high balconies, and streets with heavy traffic. Once these hazards are identified, the caregiver can begin to make them less accessible to the AD patient.

Preventive measures might also include placing door locks out of the AD patient's normal line of vision (either very high or very low), using a double-bolt lock, and using safety latches.

Resources

The "MedicAlert+ Safe Return" Program

The Alzheimer's Association (headquartered in Chicago) developed "MedicAlert+ Safe Return" to help identify, locate and return AD patients to their families.

The Safe Return Program registers AD patients in a national database by age, name, address, physical description and medical conditions. In addition, the name, address and telephone numbers of up to three contact people are listed, as well as the AD patient's local police department. The database is kept private and secure so only authorized personnel have access to the information.

The registration fee is \$55 plus \$7 s/h. To register or for more information, call 1-888 572-8566 for the nearest Alzheimer's Association chapter. Once registered, AD patients receive an identity bracelet or necklace, clothing labels and wallet cards. These items indicate that the individual's memory is impaired and provide an identification number and a toll-free number to call.

If a loved one leaves home or gets separated from family or guardian, caregivers also can call the toll-free number to report the missing person. An alert is sent to a network including law enforcement, medical professionals, and local chapter staff to assist the member. Anyone trying to help a memory-impaired person can get the toll-free number from the identity bracelet and call the national database. The database will contact the caregiver and notify where the AD patient can be picked up.

The Alzheimer's Association

Announcements of new developments in Alzheimer's research, as well as news stories about public figures with the disease, increase awareness of just how common AD is and how much it impacts the family. Early diagnosis is important in helping families plan, as well as improve quality of life for the patient and the caregiver. The

Alzheimer's Association can help with all issues AD families face, and maintains offices across Colorado, including Denver, Colorado Springs, Pueblo, Durango, Grand Junction, Fort Collins, and Greeley. They can also be reached at 1-800-272-3900 and are always available to assist individuals and their families who are faced with any type of dementia. Visit their Web site at www.alz.org/co for more information.

References

- Alzheimer's Association (2013, September). Alzheimer's facts and figures. Retrieved on September 3, 2013 from www.alz.org.
- Coping and Caring: Living With Alzheimer's Disease*, American Association of Retired Persons, Washington, D.C., 1991 (Publication Stock #D122441).
- The Vanishing Mind: A Practical Guide to Alzheimer's Disease and Other Dementias*, by L. Heston and J. White; New York: W. H. Freeman and Company, 1991.
- Comforting the Confused: Strategies for Managing Dementia*, by S. Hoffman and C. Platt; New York: Springer Pub. Co., 1991.
- Simple Techniques for Communicating With People With Alzheimer's Type Dementia*, by N. Feil; Baltimore: Health Professions Press, 1992.
- The 36-Hour Day: A Family Guide to Caring for Persons With Alzheimer's Disease, Related Dementing Illnesses and Memory Loss in Later Life*, by N. L. Mace and P. V. Rabins; Baltimore: Johns Hopkins University Press, 1991.
- "Aging Brain, Aging Mind," by D. J. Selkoe, *Scientific American*, September 1992, pages 135-142.