

ACTION SERIES

*S*teps To
Getting A
Diagnosis:

FINDING
OUT IF IT'S
ALZHEIMER'S
DISEASE

Alzheimer's Association

Memory loss and changes in mood and behavior are some signs that you or a family member may have Alzheimer's disease. If you have noticed these signs, it is important to receive a diagnosis for the following reasons:

Many things can cause dementia, a decline in intellectual ability severe enough to interfere with a person's daily routine. Dementias related to depression, drug interaction and thyroid problems may be reversible if detected early.

Other causes of dementia include strokes, Huntington's disease, Parkinson's disease and Pick's disease. Alzheimer's disease is the most common cause of dementia. It is important to identify the actual cause in order for the individual to receive the proper care.

The individual who may have Alzheimer's disease may be able to maximize the quality of his or her life by receiving an early diagnosis. It may also resolve the anxiety of wondering "What is wrong with me?"

An early diagnosis allows more time to plan for the future. Decisions regarding care, living arrangements, financial and legal issues, and other important issues can be addressed.

Alzheimer's disease is known to strike persons in their 40s and 50s. This "early onset" form of Alzheimer's disease presents unique planning issues for the individual and family.

A diagnosis enables you to establish a family medical history with Alzheimer's disease.

This brochure will guide you through the steps normally taken to diagnose Alzheimer's disease and the family's role in the diagnostic process.

THE DIAGNOSTIC PROCESS

There is no one diagnostic test that can detect if a person has Alzheimer's disease. The diagnosis is made by reviewing a detailed history on the person and the results of several tests, including a complete physical and neurological examination, a psychiatric assessment and laboratory tests. Once these tests are completed, a diagnosis of "probable" Alzheimer's disease can be made by process of elimination. However, physicians can be 80 to 90 percent certain their diagnosis is accurate. The process may be handled by a family physician or may involve a diagnostic team of medical professionals, including the primary physician, neurologist (a physician specializing in the nervous system), psychiatrist, psychologist and nurses.

The diagnostic process generally takes more than one day and is usually performed on an outpatient basis. It may involve going to several different locations or even to a specialized Alzheimer diagnostic center. The local chapter of the Alzheimer's Association can refer you to physicians and/or diagnostic centers in your area.

The diagnostic process involves the following:

1 DETERMINATION OF MEDICAL HISTORY

The person being tested and family members will be interviewed both individually and together to gather background information on the person's daily functioning, current mental and physical conditions, and family medical history.

2 MENTAL STATUS EVALUATION

During the mental status evaluation, the person's sense of time and place, and ability to remember, understand, talk and do simple calculations will be assessed. The person may be asked questions such as: "What year is it?" "What day of the week is it?" "Who is the current president?" The person will also be asked to complete mental exercises, such as spelling a word backwards, writing a sentence, or copying a design.

When reviewing the test results, the physician will consider the individual's overall performance in relation to his or her educational background and occupation.

3 PHYSICAL EXAMINATION

During the physical exam, the physician will evaluate the person's nutritional status and check blood pressure and pulse. The physician will also search for the presence of cardiac, respiratory, liver, kidney and thyroid diseases, and atherosclerosis (hardening of the arteries). Some of these conditions can cause dementia-like symptoms.

4 NEUROLOGICAL EXAM

A physician, usually a neurologist, will closely evaluate the person's nervous system for problems that may signal brain disorders other than Alzheimer's disease. The physician will search for evidence of previous strokes, Parkinson's disease, hydrocephalus (fluid accumulation in the brain), a brain tumor, and other illnesses that impair memory and/or thinking. The physician will learn about the health of the brain by testing coordination, muscle tone and strength, eye movement, speech and sensation. For example, the physician will test reflexes by tapping the knee, check the person's ability to sense feeling on their hands and feet, and listen for slurred speech.

5 LABORATORY TESTS

A variety of laboratory tests will be ordered by the physician to help diagnose Alzheimer's disease by ruling out other disorders. A complete blood count and blood chemistry will be ordered to detect anemia, infection, diabetes, and kidney and liver disorders. Levels of vitamin B 12 and folic acid (a vitamin produced by the body) are measured, as low levels can be associated with dementia. Since very high or low amounts of the thyroid hormone can cause confusion or dementia, levels of the thyroid hormone are measured through a blood test.

The physician may also order an EEG (electroencephalogram) to detect abnormal brain wave activity.

This test can detect conditions such as epilepsy, which can sometimes cause prolonged mild seizures that leave a person in a confused state.

A CT (computerized tomography) scan, which takes X-ray images of the brain, is also frequently used. The brain is scanned for evidence of tumors, strokes, blood clots and hydrocephalus. MRI (magnetic resonance imaging) is another brain-imaging technique sometimes used. More experimental tests may also be recommended but are not necessary for the diagnosis. These include PET (positron emission tomography), which shows how different areas of the brain respond when the person is asked to perform different activities, such as reading, listening to music, or talking; and SPECT (single proton emission computed tomography), which shows how blood is circulating to the brain.

6 PSYCHIATRIC, PSYCHOLOGICAL AND OTHER EVALUATIONS

A psychiatric evaluation can rule out the presence of other illnesses, such as depression, which can result in memory loss similar to dementia of the Alzheimer type. Neuropsychological testing may also be done to test memory, reasoning, writing, vision-motor coordination and ability to express ideas. These tests may take several hours, and may involve interviews with a psychologist, as well as written tests. These tests provide more in-depth information than the mental status evaluation.

Nurses, and occupational, rehabilitation or physical therapists may be called upon to look for problems with memory, reasoning, language and judgment affecting the person's daily functioning.

UNDERSTANDING THE DIAGNOSIS

Once testing is completed, the diagnosing physician or other members of the diagnostic team will review the results of the examinations, laboratory tests and other consultations to arrive at a diagnosis. If all test results appear to be consistent with Alzheimer's disease, the clinical diagnosis will be 'probable Alzheimer's disease' or "dementia of the Alzheimer type." If the symptoms are not typical, but no other cause is found, the diagnosis will be "possible Alzheimer's disease."

Although researchers have made enormous progress in diagnostic testing, the only way to prove Alzheimer's disease is through an autopsy.

If a cause of dementia other than Alzheimer's disease is diagnosed, call the Alzheimer's Association to request a free informational brochure about related causes of dementia.

THE FAMILY'S ROLE IN DIAGNOSIS

While some people with Alzheimer's disease may initiate their own diagnosis and care, for most, it will be up to another family member to alert the physician.

Here are some tips that will help you get someone to the physician for an initial evaluation:

- ▶ **Schedule the appointment for the person.**
- ▶ **Help with transportation to the appointment.**
- ▶ **Read this booklet as a family to gain a better understanding of what to expect during the diagnostic process.**
- ▶ **Contact your local chapter of the Alzheimer's Association if you have any concerns or questions.**
- ▶ **Offer to accompany the person during the testing process if he or she is still uneasy about investigating possible Alzheimer's disease.**

On the day of the appointment, bring along items such as glasses, hearing aids, devices that help the person walk, a list of medications the person is taking, and other personal items that might help during diagnostic testing. Be sure the physician has all medical records, insurance and social security information.

PREPARING FOR DIAGNOSTIC TESTS

Once the initial appointment has been made to evaluate a person, the diagnostic team will need certain information to make an accurate diagnosis. Pages 9 and 10 list questions that you may be asked by the diagnostic team, as well as questions that you may want to ask regarding the diagnostic process. It may be helpful to start writing down events that occur, and any changes in the person's abilities, behavior and personality that cause you to suspect Alzheimer's disease.

Questions You May Be Asked:

- ▶ **What symptoms have you noticed?**
 - Difficulty performing simple tasks?
 - Recent memory loss that affects job skills?
 - Poor or decreased judgement?
 - Others?
- ▶ **When did the symptoms first appear?**
- ▶ **How have the symptoms changed over time?**
- ▶ **Does the person suffer from other medical conditions?**
- ▶ **Is the person taking any medications?**
- ▶ **Have other family members been diagnosed with Alzheimer's disease?**

Questions To Ask Before Diagnostic Testing:

- ▶ **Which tests will be performed?**
- ▶ **Will any of the tests involve pain or discomfort for the person?**
- ▶ **How long will the tests take?**
- ▶ **How long will it take to learn the results of the tests?**

Questions To Ask If The Diagnosis Is Probable Alzheimer's Disease:

- ▶ **What does the diagnosis mean?**
- ▶ **What symptoms can be anticipated next?**
- ▶ **How will they change over time?**
- ▶ **What level of care will be required now and in the future?**
- ▶ **What medical treatment is available?**
- ▶ **What are the risks and effectiveness?**
- ▶ **What changes should be made in the home to make it safer?**
- ▶ **What resources and support services are available in our community?**
- ▶ **Are experimental drug trials available?**

Alzheimer's disease is not currently preventable, but science and medicine continue to make promising advances. Obtaining an early and accurate diagnosis is an important strategy in helping to improve the quality of life for person's with dementia and their families.

ALZHEIMER'S ASSOCIATION

Through its nationwide network of chapters, the Association offers a broad range of programs and services for people with the disease, their families, and caregivers. These services include support groups, telephone helplines, educational seminars, advocacy programs, and a variety of print and on-line resources on the disease, caregiving approaches, and current research.

Research into the causes, treatment, and prevention of Alzheimer's disease will create new options for treatment and care. The Alzheimer's Association, the largest private funder of Alzheimer research, is dedicated to supporting scientists who are making advances toward conquering this disease.

For more information or to locate the chapter nearest you call:

(800) 272-3900

Alzheimer's Association

225 North Michigan Avenue
17th Floor
Chicago, IL 60601-7633
(800) 272-3900
www.alz.org