University of Washington
Alzheimer's Disease Research Center
VA Puget Sound Health Care System, S-116-6East
1660 S. Columbian Way Seattle, WA 98108
(206) 764-2069 1-800-317-5382

Ten Common Questions Asked about Alzheimer's Disease

1. What is "senility?"

It has been very common to describe an older person who has a loss of memory and perhaps other functions and who may require help with care as being "senile." However, the word "senile" just means "old." Normal aging does not cause this type of impairment. If one sees progressive loss of memory in later life severe enough to cause impairment of ability to live independently, that person probably has what we call dementia.

2. What is dementia?

Dementia is the acquired loss of memory and other intellectual abilities that is severe enough to impair daily function. Most forms of dementia in the aged are progressive, in other words the problems with memory and other abilities get worse over time. The most common form of dementia in later life is Alzheimer's disease. Other forms of dementia associated with aging include dementia with Lewy bodies, fronto-temporal dementia, and vascular dementia.

3. What are the early signs of Alzheimer's disease?

Usually, the first symptom of Alzheimer's disease is loss of memory for recent events. This often takes the form of being repetitive in conversation, forgetting recent events, misplacing items, forgetting appointments, and if the person is still working, having trouble performing usual work tasks. Memory for past events, such as from the patient's childhood or young adulthood are still very well preserved.

Often, family members note a change in the patient's personality. This most usually takes the form of apathy--a previously caring spouse or parent may become more self-absorbed or lose interest in his or her loved ones or usual activities.

Occasionally, the Alzheimer's patient may become depressed. This occurs more commonly early in the course of the disease when the patient may have some awareness of his or her difficulties.

However, more often than not, Alzheimer's patients have very little insight into their memory problem--they will frequently deny having a memory problem and it is usually the patient's spouse or other family member who recognizes

that there is a problem. Also at this stage of the illness, there may be some impairment of judgment and reasoning skills.

A key feature of these symptoms is that the onset is “insidious”. This means the symptoms have come on so slowly and gradually that it is usually very difficult for family members to pinpoint when things seemed to become abnormal.

4. How does one diagnose Alzheimer’s disease?

The clinical diagnosis of Alzheimer’s disease is based on a careful history from a family member or other person who knows the patient well and a clinical examination of the patient’s cognitive and neurologic status.

Medications the patient is taking are reviewed to rule out side effects that might cause cognitive impairment and mimic dementia. The patient is also evaluated for depression.

In addition, a few simple laboratory tests are performed to rule out reversible causes of dementia. These include blood chemistries, complete blood count, tests of thyroid function, and vitamin B12. In addition, often a head imaging study is performed to rule out brain tumor or strokes as a cause of the patient’s dementia.

The diagnosis is worded *probable Alzheimer's disease* because a definite diagnosis can only happen when an autopsy of the brain is performed after death. However, clinical assessments while a person is living are able to determine with at least 90% accuracy a diagnosis of Alzheimer’s disease in patients.

5. What are the risk factors for Alzheimer’s disease?

The MAJOR identified risk factors for Alzheimer's disease are advancing age, family history, and a history of Down's syndrome.

People with Down's syndrome get Alzheimer's about 30 years before the general population; in fact, they almost all get it if they live to the age of 40.

Advancing age, however, still remains the BIGGEST risk factor for the development of Alzheimer's disease.

6. Is Alzheimer’s disease inherited?

Genetic issues are important, but complicated. Alzheimer’s disease is often divided into “sporadic” and “familial” forms. “Sporadic” means one person in a family is affected, but there is no other family history. “Familial” means more than one person in a family is affected. Familial Alzheimer’s disease can be divided into early onset (onset before age 60) and late onset (onset after age 60). Early onset familial Alzheimer’s disease is rare, but some genes have been found that are now known to cause this form of Alzheimer’s disease. Late onset familial Alzheimer’s disease is more common, and genetic factors are still being investigated. For information on genetic studies of Alzheimer’s disease at our research center, contact Ellen Steinbart at 206-764-2112 or Malia Rumbaugh at 206-277-6645.

7. What is ApoE?

Apolipoprotein E is a cholesterol transport protein and has been found in the amyloid plaques in Alzheimer's disease. It comes in several types or *alleles* - 2, 3, and 4. Each person has two alleles (one from each parent) which you can have in any combination of the three types.

Apolipoprotein E-4 has been shown to increase the risk of Alzheimer's disease but does not cause Alzheimer's disease, whereas apolipoprotein E-2 decreases the risk of Alzheimer's disease. Apolipoprotein E-3, the allele that occurs most commonly, neither increases nor decreases the risk of Alzheimer's disease.

The way Apolipoprotein E-4 increases risk is unknown, but it is being studied intensely.

Finding out one's apolipoprotein E type is NOT a genetic test for Alzheimer's disease. Although more people with E-4 eventually get the disease than those with E-3 or 2, some people with E-4 never get Alzheimer's.

8. Can Alzheimer's disease be prevented?

This is really not clear. There is some evidence that certain antioxidant vitamins may slow progression of Alzheimer's disease and, by logical extension, may delay onset. It is important to consult with your health care provider about the use of vitamins; for example, new research shows that people with coronary artery disease should avoid large doses of vitamin E. There is also some data that continued mental stimulation and exercise may be helpful in delaying the onset of Alzheimer's disease.

Although aluminum can damage brain cells if it gains access to the brain, the body has very strong defenses to keep out aluminum. Extensive studies in humans and animals have made it increasingly unlikely that aluminum plays a causative role in Alzheimer's disease. However, this issue continues to be studied. There is no evidence that "chelation therapy" designed to remove aluminum and other metals from the body is an effective therapy for Alzheimer's disease.

General measures to protect brain cells during life are important. These include treating hypertension, avoiding excessive alcohol use and taking precautions to prevent traumatic brain injury during life (especially by wearing seat belts and cycle helmets). The development of diabetes and high cholesterol are now each linked to a possible increased risk for developing Alzheimer's disease.

9. How useful are new medications in the treatment of Alzheimer's disease?

Currently, there are four commonly used FDA-approved medications for the treatment of memory problems in Alzheimer's disease. These are Aricept (donepezil), Exelon (rivastigmine), Razadyne (galantamine- previously called Reminyl) and Namenda (memantine). These medications are treatments that may improve functioning and modestly slow progression of the disease.

Currently, there is no cure for Alzheimer's disease. Namenda can be taken while one is also taking Aricept, Exelon, or Razadyne.

10. What do you see on the horizon?

Current efforts are aimed at more effective medications to slow progression, delay onset, and ultimately prevent Alzheimer's disease -- for example, drugs that prevent formation of or remove beta-amyloid. The ADRC is currently screening potential participants for these studies which will begin enrollment during 2008 and 2009. Also important will be the development of medications that more effectively treat the problem behaviors that occur in the middle and late stages of Alzheimer's disease. More effective treatments for these behavioral problems may extend the time that Alzheimer's patients can be cared for at home and decrease burden on caregivers. Currently, a study is underway at the University of Washington Alzheimer's Disease Research Center that is investigating the effectiveness of a medication called Prazosin for the treatment of agitation in people with dementia.

For more information about the Alzheimer's Disease Research Center including how you might be able to participate in research:

Call Beth at 206-764-2069 or 1-800-317-5382.