

## Brief Note on Alzheimer's Disease

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### Introduction

Alzheimer's disease is a progressive neurological disease that has no cure or treatment. The illness wreaks havoc on a person's recollection, reasoning, understanding, and planning abilities, ultimately impairing their capacity to perform basic everyday tasks. Alzheimer's disease isn't a natural feature of becoming older. Alzheimer's disease is a progressive disease with signs that worsen over time. The most prominent cause of dementia is Alzheimer's disease (accounting for 60 percent to 80 percent of cases). In the United States, Alzheimer's disease is the sixth leading cause of death [1].

### Causes & Symptoms

The excess build-up of proteins in the brain causes Alzheimer's disease. The accumulation of these proteins, which are known as amyloid protein and tau protein, causes cell death. Alzheimer's disease symptoms differ from person to person and worsen over time. Alzheimer's syndrome is a chronic disease, which means the symptoms worsen over time. Memory loss is a common symptom, and it's usually one of the first to appear. The signs and symptoms appear over months or years. An individual can need medical attention if they grow over hours or days.

### Diagnosis

Alzheimer's syndrome can't be diagnosed by a simple examination. If a psychiatrist detects the existence of the disease, the patient and also their relatives or caregivers will be asked about their signs, memories, and thoughts.

- Cognitive and memory tests, to assess the person's ability to think and remember
- Neurological function tests, to test their balance, senses, and reflexes
- Blood or urine tests
- A CT scan or MRI scan of the brain
- Genetic testing [2]

To test cognitive ability, a variety of instruments are available. Genetic tests may be necessary in some circumstances, since the symptoms of dementia may be linked to an inherited disorder like Huntington's disease. Any APOE e4 gene variants have been linked to an increased risk of Alzheimer's disease.

### Medications

There are currently no prescription therapies available to reverse Alzheimer's disease or any other form of dementia. However, there are medications for Alzheimer's disease that can temporarily relieve symptoms or delay the development of the disease in certain patients. These medications do not delay or stop the progression of the underlying brain disease. A variety of treatments can deal with behavioural issues associated with this disorder, such as rage outbursts. However, they work well when combined with other environmental strategies, such as simplifying the home climate. Donepezil (Aricept), rivastigmine (Exelon), galantamine (Razadyne, formerly Reminyl), and memantine are four FDA-approved medications that are currently used to treat Alzheimer's disease (Namenda). Since tacrine (Cognex) has been linked to serious liver disorders, doctors rarely prescribe it. All of these drugs function by affecting specific chemical messengers in the brain and have only minor side effects [3].

The medications donepezil, rivastigmine, galantamine, and tacrine are also cholinesterase inhibitors. These medications help the brain's acetylcholine signalling. Standard memory mechanism necessitates the presence of this chemical messenger in the proper concentrations. The treatment's hypothesis is that increasing acetylcholine levels can increase memory. It's also a good idea to keep an eye out for side effects, particularly if the patient is unable to speak clearly. Individual reactions to these drugs are very variable. In certain cases, a medication that benefits one patient cannot help another or even intensify their symptoms. Anti-anxiety medications, unlike opioids, work easily, often about an hour. Older patients, on the other hand, are more vulnerable to these medications. Patients can become over sedated and more vulnerable to dropping if the dosage is too high. As a result, clinicians should administer the smallest dose that is safe. Anti-anxiety drugs that have a limited lifespan that can be administered in minimal doses are another way to reduce these side effects. Anti-anxiety drugs that have a limited lifespan that can be administered in minimal doses are another way to reduce these side effects. Instead of taking scheduled injections, patients with only intermittent nervous episodes should be administered a fast-acting anti-anxiety medication if prescribed.

### References

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