

## A Brief Note on Alzheimer's Disease

Shuji Ogino\*

Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA, USA

\*Corresponding author: Dr Shuji Ogino, Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA, USA, E-mail: shuji\_ogino147@dfci.harvard.edu

Received date: September 27, 2021; Accepted date: October 11, 2021; Published date: October 18, 2021

Citation: Ogino S (2021) A Brief Note on Alzheimer's Disease. *Epidemiol Sci* 11: 413.

Copyright: © 2021 Ogino S. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

### About the Study

Alzheimer's Disease (AD) is a progressive neurological illness that begins slowly and worsens with time. It is responsible for 60%-70% of dementia cases. The most common early indication is remembering recent events. Language difficulties, disorientation (including getting lost easily), mood changes, loss of desire, self-neglect, and behavioral disorders are all possible signs as the condition progresses.

Alzheimer's disease is a disease whose etiology is unknown. Its development is related to several environmental and genetic risk factors. An allele of the APOE gene is the most powerful genetic risk factor. Risk factors include a history of brain injury, severe depression, and high blood pressure. Amyloid plaques, neurofibrillary tangles, and the loss of neuronal connections in the brain are all associated with the disease. Initial symptoms are frequently misinterpreted as signs of normal aging.

For a definitive diagnosis, the brain tissue should be examined, and it can happen only after death. Good diet, physical exercise, and social meeting are all known to aid with aging, and these factors may also help to reduce the incidence of cognitive decline and Alzheimer's disease. There are no drugs or supplements that have proven to reduce the risk of heart disease.

There are no therapies that can stop or reverse the disease's development, but, some can temporarily alleviate symptoms. People who are affected will be dependent on others for assistance, putting pressure on caretakers. There might be a combination of social, psychological, physical, and financial stressors. Exercise programs may be useful in terms of everyday activities and might perhaps enhance results. Antipsychotics are commonly used to treat behavioral difficulties or psychosis caused by dementia, although they are rarely prescribed since they provide little benefit and raises the risk of premature mortality.

### Signs and symptoms

Alzheimer's disease has three phases, each marked by a gradual pattern of cognitive and functional deterioration. Early or mild, middle or moderate, and late or severe are the three phases. The illness is known to affect the hippocampus, which is linked to memory and is the source of the earliest signs of memory loss. The degree of memory impairment increases as the illness develops.

### Early stage

The progressive deterioration of learning and memory in persons with Alzheimer's disease finally leads to a definite diagnosis. Language, executive functions, perception (agnosia), and movement execution (apraxia) issues outnumber memory problems in a tiny minority of people. Alzheimer's disease doesn't affect everyone's memory in the same way. Older memories of a person's life (episodic memory), acquired facts (semantic memory), and implicit memory (the body's knowledge of how to perform tasks, such as eat with a fork or drink from a glass) are less impacted than fresh facts or memories.

### Middle stage

Gradual deterioration obstructs independence, leaving people unable to do the majority of daily duties. Reading and writing abilities are also diminishing. As Alzheimer's disease develops, complex motor sequences become less coordinated, increasing the risk of falling. At this point, the person may have memory problems and be unable to recognize close relatives. Long-term memory begins to degrade, which was previously untouched.

Changes in behavior and neuropsychiatry become increasingly common. Wandering, impatience, and emotional lability are common symptoms, which can lead to weeping, unpremeditated violence, or resistance to caring. Sun downing is another possibility. Around 30% of patients with Alzheimer's disease experience delusional symptoms such as illusionary misidentifications. Subjects lose awareness of their illness process and limits as well (anosognosia). It is possible to develop urinary incontinence.

### Late stage

The patient is entirely reliant on caretakers at the last stage, often called the late-stage or severe stage. Language is reduced to simple phrases or even single words, eventually leading to the loss of all ability to speak. People may often understand and respond to emotional cues despite their loss of spoken language abilities. Although aggression may persist, severe apathy and fatigue are far more prevalent symptoms. Alzheimer's patients eventually lose their ability to conduct even the most basic chores on their own; their muscle mass and movement decline to the point where they are bedridden and unable to feed themselves.