

Alzheimer's disease: A Brief Review

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ABSTRACT

Alzheimer disease is a type of dementia that is characterized by progressive deterioration in memory and other aspects of cognition. This is a chronic, progressive, neurodegenerative disease of the brain. It is the most common form of dementia, accounting for 60% to 80% of all cases of dementia of this disease named after Alois Alzheimer's, a German physician who in 1906 described changes in the brain tissue of a 55-year-old woman who had died of an unusual mental illness.

This disease is characterized by progressive destruction in memory or other aspects of cognition. The disease begins insidiously and is characterized by gradual loss of cognitive and functional ability and disturbance in behaviour and affect. Alzheimer's disease has been associated with lower socio-economic status and education level and poor access to health care. Women are more likely than men to develop Alzheimer's disease primarily because they live longer.

In this type of disease include neurofibrillary tangles and beta-amyloid plaques in the cerebral cortex and hippocampus.

Introduction

The world population is aging rapidly and cases of dementia are increasing. 35 million people worldwide are reported to have Alzheimer's disease (Alzheimer's disease) or other types of dementia, and it is expected that around 65 million people will have a dementia problem by 2030. Alzheimer's disease is one of the most common forms of dementia. Alzheimer's disease is a progressive multifactorial neurodegenerative brain disease with no known cause, and several modifiable and uncontrollable risk factors are associated with its development. Age is the greatest non-genetic risk factor of all. It causes functional and structural changes in the nerve cells of the brain. In the early stages of the disease, it also causes synaptic dysfunction of nerve cells that affects communication within neural circuits that are important for memory and other cognitive functions.

This article is based on the effects of Alzheimer's disease on adults or elderly patients. Also, it will help to diagnose this type of disease more effectively; most of the cases of this disease have been found younger than 60 years old.

Individuals with a clear pattern of inheritance within a family have familial Alzheimer's disease (familial Alzheimer's disease). Other cases in which no familial connection can be made are termed sporadic familial Alzheimer's disease. Alzheimer's disease is associated with an early onset and more than rapid disease course.

Causes of Alzheimer's disease:

The cause of disease is still unclear. There is a possibility of genetic etiology. At least four chromosomes are involved in some forms of familial Alzheimer's disease.

The greatest risk factor for Alzheimer's disease is age. Most people with Alzheimer's disease are diagnosed at age 65 or older. While age is the greatest risk factor, age is not a normal part of aging and age alone is not sufficient to cause the disease.

Family history is also an important risk factor, since those with a first-degree relative with dementia have more likely to develop the disease.

Clinical Manifestation

- Memory loss
- Ability to formulate to concept and think abstractly disappears.
- Changes in cognitive functioning.
- Unable to communicate and engage in activities of daily life.
- Personality changes are evident; patient may become depressed, suspicious, paranoid, hostile and combative.

Drug therapy for Alzheimer's disease

Overview of drug therapy for Alzheimer's disease, the current drug therapy for Alzheimer's disease only leads to an improvement in the short term. Duration six to eighteen months.

Only drugs approved in the United States and many more cholinesterase inhibitors are available in some parts of Europe for short-term symptom relief and meantime. These drugs do not affect the

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pathology of Alzheimer’s disease, but they do allow the brain.

Compensate for damage to neurons that communicate with acetylcholine; a Neurotransmitter In this part the medical effect becomes more possible. Pharmacological treatment for Alzheimer’s disease.

Status New drugs are being developed to combat Alzheimer's disease. The disease is shown in Table-1.

Drug name	Indication	Company	Development Status
ABT-126 acetyl cholinesterase	Alzheimer disease	Abbott	Phase 2
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LY2886721	Alzheimer disease	Eli Lilly and Company	Phase 1
AZD3480	Alzheimer disease	Targacept Inc.	Phase 2

Conclusion

Alzheimer’s disease is a chronic progressive degenerative disease of the brain. Pathologic changes associated with Alzheimer’s disease include neurofibrillary tangles and beta –amyloid plaques in cerebral cortex and hippocampus. An initial sign of disease is a subtle deterioration in memory inevitably this progresses to more profound memory loss that interferes with the patient’s ability to function.

The diagnosis of Alzheimer’s disease is a diagnosis exclusive when all other possible conditions that can cause mental impairment has been ruled out and the manifestation of dementia persists the diagnosis can be made CT scan and MRI scan may show brain atrophy and enlarged ventricles .

References

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