



Alzheimer's Disease: An Overview

Kenneth Davis*

Department of Psychiatry, Mount Sinai School of Medicine, New York, USA

DESCRIPTION

Alzheimer's disease (AD) is a neurological illness that causes considerable cognitive and behavioural impairment, interfering with social and vocational functioning. It is an incurable disease that has a protracted preclinical period and progresses over time. Plaques form in the hippocampus, a deep brain region that helps to encode memories, as well as other sections of the cerebral cortex involved in thinking and making decisions, in Alzheimer's disease. It's unclear if plaques cause Alzheimer's disease or are only a by-product of the disease. Hippocampal atrophy is one of the most common neuroimaging findings in Alzheimer's disease.

Clinical, cognitive, and neuroimaging evaluations are being used to diagnose Alzheimer's disease. Routine structural MRI examination has long been predicated on nonspecific signs like atrophy, which occurs later in the disease's development. More recently, imaging modalities such as structural and functional magnetic resonance imaging (MRI) and positron emission tomography (PET) examinations of cerebral metabolism have revealed distinctive abnormalities in the brains of Alzheimer's disease patients in prodromal and even presymptomatic states.

Alzheimer was the first to describe Alzheimer's disease in 1907. Alzheimer's disease has gone from being a rare disease to being one of the most frequent diseases among the elderly, ranking as the fourth leading cause of mortality. Alzheimer's disease is a chronic, irreversible brain illness. The formation of amyloid

plaques and neurofibrillary tangles, as well as the loss of connections between nerve cells, or neurons, in the brain, and the death of these nerve cells, are all symptoms of Alzheimer's disease. The new Alzheimer's disease classification incorporates two additional stages of the disease: presymptomatic and minimally symptomatic but not predementia, as well as dementia induced by Alzheimer's disease. This is in line with current theory that Alzheimer's disease causes distinct and observable changes in the brains of those who are affected years before the disease manifests itself.

Alzheimer disease is a chronic, neurodegenerative disorder of the aging population that results in progressive cognitive and behavioral dysfunction. Afflicting more than 6 million Americans and more than 8 million Europeans, Alzheimer disease is the most common form of dementia and a worldwide concern. It is generally projected that the rate of Alzheimer disease diagnosis and the costs to healthcare worldwide will increase, although a recent report of seven cohort studies including over 49,000 individuals in the United States and Europe indicates a downward trend in new diagnoses.

Although the cause of Alzheimer disease is unknown, there is suspicion of the convergence of environmental and genetic risk factors that, over years, leads to the pathophysiologic changes associated with Alzheimer disease. However, recent scientific research indicates that the biological signs of Alzheimer disease are present 10-20 years before symptom onset, placing new focus on prevention, early recognition, and early treatment strategies.

Correspondence to: Kenneth Davis, Department of Psychiatry, Mount Sinai School of Medicine, New York, USA, E-mail: Kenneth@davis.edu

Received: 01-Mar-2022, Manuscript No. BDT-22-16470; **Editor assigned:** 04-Mar-2022, PreQC No. BDT-22-16470 (PQ); **Reviewed:** 18-Mar-2022, QC No. BDT-22-16470; **Revised:** 23-Mar-2022, Manuscript No. BDT-22-16470 (R); **Published:** 31-Mar-2022, DOI: 10.35248/2168-975X.22.11.151.

Citation: Davis K (2022) Alzheimer's Disease: An Overview. Brain Disord Ther.11:151.

Copyright: © 2022 Davis K. 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.