

Abstract

Alzheimer's disease is a neurodegenerative disorder that mostly affects the elderly population and since our lifespan increases, Alzheimer's disease is one of the most serious diseases of the 21st century. There are two types of Alzheimer's disease, namely familial (FAD) and sporadic Alzheimer's disease (SAD) that differ in the age of onset and contribution of the genetic factors – the familial form is genetically predisposed whereas the genes involved in the sporadic form are perceived as risk factors. However, their clinical manifestation is similar. Alzheimer's disease causes dementia that is characterized by memory loss and a steady decline in the early stages. Unfortunately, there are still many discrepancies regarding Alzheimer's disease and there are multiple approaches in research concerning Alzheimer's disease. One of the possible approaches in finding new mechanisms involved in Alzheimer's disease is in genetics – we can find new genetic loci involved in this disease and investigate new mechanisms via studying newly identified genes.

Key words: sporadic form of AD, familiar form of AD, beta amyloid, apolipoprotein E, amyloid precursor protein, presenilin, genome wide association study