



Alzheimer's disease

Alzheimer's disease (**AD**) is a neurodegenerative disease that usually starts slowly and progressively worsens.^[2] It is the cause of 60–70% of cases of dementia.^{[2][15]} The most common early symptom is difficulty in remembering recent events.^[1] As the disease advances, symptoms can include problems with language, disorientation (including easily getting lost), mood swings, loss of motivation, self-neglect, and behavioral issues.^[2] As a person's condition declines, they often withdraw from family and society.^[16] Gradually, bodily functions are lost, ultimately leading to death. Although the speed of progression can vary, the average life expectancy following diagnosis is three to twelve years.^{[11][12][13]}

The causes of Alzheimer's disease remain poorly understood.^[16] There are many environmental and genetic risk factors associated with its development. The strongest genetic risk factor is from an allele of apolipoprotein E.^{[17][18]} Other risk factors include a history of head injury, clinical depression, and high blood pressure.^[1] The progression of the disease is largely characterised by the accumulation of malformed protein deposits in the cerebral cortex, called amyloid plaques and neurofibrillary tangles. These misfolded protein aggregates interfere with normal cell function, and over time lead to irreversible degeneration of neurons and loss of synaptic connections in the brain.^[19] A probable diagnosis is based on the history of the illness and cognitive testing, with medical imaging and blood tests to rule out other possible causes.^{[8][20]} Initial symptoms are often mistaken for normal brain aging.^[16] Examination of brain tissue is needed for a definite diagnosis, but this can only take place after death.^{[21][22]}

No treatments can stop or reverse its progression, though some may temporarily improve symptoms.^[2] A healthy diet, physical activity, and social engagement are generally beneficial in aging, and may help in reducing the risk of cognitive decline and

Alzheimer's disease

Other names Alzheimer's dementia

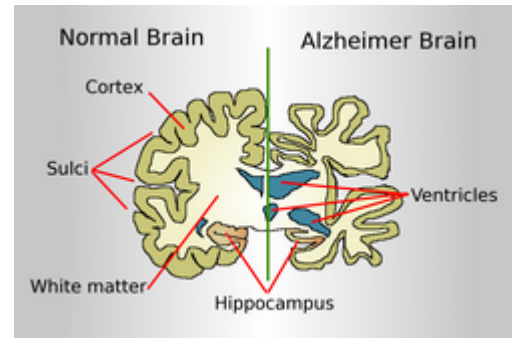


Diagram of a normal brain compared to the brain of a person with Alzheimer's

Pronunciation ⁱ/ˈæltʃaɪmərz/,
US also ⁱ/ˈɑːltʃ-/

Specialty Neurology

Symptoms Memory loss, problems with language, disorientation, mood swings^{[1][2]}

Complications Infections, falls and aspiration pneumonia in the terminal stage^[3]

Usual onset Over 65 years old^[4]

Duration Long term^[2]

Causes Poorly understood^[1]

Risk factors Genetics, head injuries, clinical depression, hypertension,^[1] psychological stress,^[5] lack of physical^[6] and mental^{[5][7]} exercise

Diagnostic method Based on symptoms and cognitive testing after ruling out other possible causes^[8]

Differential diagnosis Normal brain aging,^[1] Lewy body dementia,^[9] Trisomy 21^[10]

Medication Acetylcholinesterase inhibitors, NMDA receptor