Alzheimer’s Disease Dementia: Diagnostic Criteria & Clinical Manifestations

Alzheimer's Disease Neuropsychology · https://neuro.vip/neuropsychology/neuropsychology-of-alzheimers-disease/alzheimers-disease-dementia-clinical-manifestations-diagnostic-criteria/

Alzheimer's disease is a progressive neurodegenerative disorder that primarily affects older adults. It is characterized by the accumulation of abnormal protein deposits in the brain, which leads to the death of brain cells and the subsequent decline in cognitive abilities. The clinical manifestations and diagnostic criteria for Alzheimer's disease revolve around **cognitive decline, memory impairment, and other common symptoms**.

Cognitive Decline

One of the hallmark features of Alzheimer's disease is a **gradual and progressive decline in cognitive abilities**. Initially, individuals may experience mild forgetfulness, such as misplacing objects or difficulty recalling recent events. As the disease progresses, cognitive decline becomes more pronounced and affects various aspects of **thinking, reasoning, and problem-solving abilities**. Tasks that were once routine and familiar may become increasingly challenging or impossible to perform.

Memory impairment

Memory Impairment: **Memory impairment is a key characteristic** of Alzheimer's disease. Individuals with Alzheimer's often have difficulty retaining new information and may frequently forget recent events or conversations. They may struggle to remember important **dates, appointments, or the names of people** they know well. **Long-term memory loss may also occur**, making it difficult for individuals to recall past experiences or personal details.

Language and Communication Problems

As Alzheimer's disease advances, individuals may experience difficulties with language and communication. **Expressive language skills** may become impaired, making it a challenge to effectively articulate thoughts or ideas. They may also experience word-finding difficulties.

Receptive language impairments may mean they struggle to follow a conversation.

Executive Dysfunction

Alzheimer's disease can affect executive functioning, which involves **managing and organizing tasks, planning, and making decisions**. Individuals may find it increasingly difficult to multitask, follow complex instructions, or solve problems. They may also exhibit poor judgment or decision-making abilities.

Behavioural and Psychological Symptoms

Alzheimer's disease can frequently manifest with behavioural and psychological symptoms. These may include changes in mood, such as **increased irritability, anxiety, or depression**. **Agitation, aggression, and social withdrawal** may also occur. Sleep disturbances, including insomnia or excessive daytime sleepiness, are common as well.

Diagnostic Criteria for Alzheimer's Disease Dementia

Diagnostic criteria for Alzheimer's disease have been established by various organizations, including, in the USA, the National Institute on Aging and the Alzheimer's Association. The criteria typically involve a comprehensive assessment of cognitive abilities, medical history, and other factors.

The key elements in diagnosing Alzheimer's disease include:

- Evidence of **cognitive decline** that impairs daily functioning.
- **Progressive worsening** of cognitive abilities over time.
- **Exclusion of other potential causes** of cognitive impairment, such as medication side effects, vitamin deficiencies, delirium or other medical conditions.
- **Objective evidence** of cognitive impairment through **neuropsychological testing** or other diagnostic tools.
- **Imaging studies** (e.g., MRI) may be used to assess brain structure and rule out other conditions.

Neuroimaging Findings in Alzheimer's Disease

Radiopedia provides a lot of detail on the neuroimaging correlates of Alzheimer's Disease, along with multiple case studies. A few case studies have been linked directly below:

Case 1: MRI only

Case 2: MRI with morphometry

Case 3: CT, MRI & SPECT

Importance of Early Detection and Diagnosis of Alzheimer's Disease Dementia

Early detection and diagnosis of Alzheimer's disease is crucial for **appropriate management, treatment planning, and compensatory strategies**. If you or a loved one are experiencing symptoms of cognitive decline or memory impairment, it is recommended to consult with a clinical neuropsychologist for a professional and comprehensive neuropsychological evaluation.

Free Parkinson's Disease MOOC

Embedded media: https://mooc.utas.edu.au/course/20281

Learn much more about Alzheimer's Disease Dementia by enrolling in a FREE MOOC offered by The Wicking Dementia Research & Education Centre.
There is also a second MOOC on Preventing Dementia.