

Case Report

Late-Onset Alzheimer's Disease in an Elderly Woman

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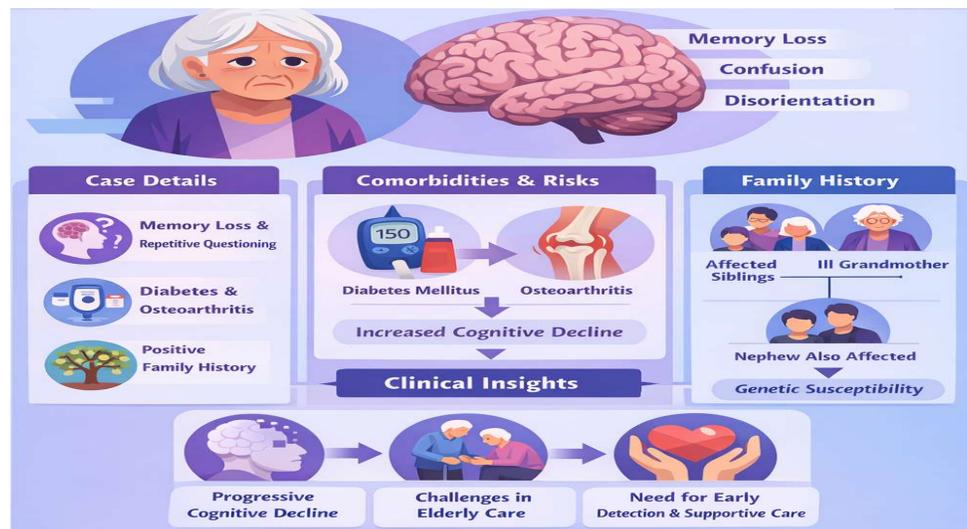
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Abstract: Alzheimer's disease is a progressive neurological condition and is the most prevalent cause of dementia in an elderly population. Some of the common symptoms include gradual cognitive decline, memory loss, and behavioral abnormalities that interfere with day-to-day functioning. We report the case of an 88-year-old woman from Peshawar who has had gradual memory loss, persistent questioning, and poor location and object identification for eight years. Along with this disease she was suffering from diabetes mellitus and osteoarthritis. The patient also had a positive family history of Alzheimer disease which may indicate neurocognitive issues. The clinical manifestation of late-onset Alzheimer's disease, the significance of family history, and the difficulties in treating dementia in older individuals with several comorbidities are all highlighted in this case.

Keywords: Late-onset Alzheimer disease, Dementia, cognitive decline, Family history, elderly female

Graphical Abstract



Case Presentation

An 88-year-old woman from Peshawar, showed signs of a gradual deterioration in her cognitive abilities during the previous eight years. Family members said that the symptoms started off as minor amnesia and progressively got worse to include asking the same questions repeatedly, forgetting recent events, and having trouble remembering the names of familiar locations and items. These symptoms worsened with time, severely impairing her independence and

day-to-day activities. A chronic and gradual course was suggested by the lack of a history of acute disorientation, head trauma or abrupt neurological impairments. The patient has a noteworthy family history, with several siblings suffering from comparable illnesses. Her maternal grandmother, and a brother who passed away, is said to have had a similar illness. One sister tested positive for the illness and passed away; significantly, this sister's son has also been reported to be infected. A potential hereditary susceptibility is suggested by this strong familial pattern. She has a noteworthy medical history of osteoarthritis and diabetes mellitus, both of which have received conservative treatment. No history of substance abuse or mental illness was recorded. Given the patient's advanced age and family history, as well as the slow start, progressive cognitive loss, noticeable memory impairment, and functional deterioration, a clinical diagnosis of late-onset Alzheimer's disease was thought to be most compatible with her presentation.

Discussion

Alzheimer's disease is the most common cause of dementia globally and is a chronic, progressive neurological condition that mostly affects older people (Scheltens et al., 2016). Late-onset Alzheimer's disease usually manifests around the age of 65 and is characterized by subtle memory impairment, particularly regarding recent events, followed by executive dysfunction, language problems, and visuospatial deficiencies (Tellechea, 2018). The patient's symptoms, which include amnesia, trouble identifying locations and things, and persistent questioning, are typical signs of Alzheimer's disease and indicate cortical involvement, especially of the hippocampus and temporal lobes. Alzheimer's disease is known to be associated with family history, particularly when several first-degree relatives have the illness (Cannon et al., 2019). Late-onset Alzheimer's disease may also exhibit family clustering because of shared genetic vulnerability and environmental variables, even if early-onset familial Alzheimer's disease is more closely associated with certain genetic abnormalities (Reitz et al., 2020). In this case, the likelihood of hereditary risk is raised by the presence of several affected relatives across generations, underscoring the significance of a comprehensive family history evaluation in patients presenting with dementia. By raising vascular risk and hastening neurodegenerative processes, comorbidities like diabetes mellitus may exacerbate cognitive loss (Chornenkyy et al., 2019). Chronic diseases and advanced age can also make management and caring more difficult, especially in settings with limited resources. Improving the quality of life for individuals with Alzheimer's disease still heavily depends on early detection, supportive treatment, comorbid condition management, and caregiver education. This case highlights the need for better knowledge, early detection, and comprehensive treatment of dementia in older adults, especially in areas where access to expert neurological care may be restricted.

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