

DEMENTIA: GUIDE TO DIAGNOSIS AND MANAGEMENT

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Dementia, now better known as neurocognitive disorder is an acquired condition characterized by substantial decline in any of the cognitive domains from previous level of function, severe enough to deteriorate activities of daily living. Currently, more than 55 million people are living with dementia, which is estimated to reach 152 million by 2050 (WHO, 2020). Death from dementia related diseases has also increased more than 2 times in last two decades (GBD, 2017). A national survey done in NINS and ICDDR,B in 2019 among persons aged more than 60 years, which reveals overall prevalence of dementia is 8.1%, burden is higher in northern region of the country, females are 2.7 times more affected than man and among many risk factors, depression and hypertension comprise the major part. Evaluation of dementia includes clinical assessment by history and examination, cognitive assessment tool (MMSE or MoCA) and investigation by routine biochemical tests to exclude potentially reversible causes and dementia mimics. Among Irreversible causes, Alzheimer's disease (AD) dementia is the most important and common cause (60-70%). Patients with AD typically presents with progressive amnesic features with subsequent appearance of other cognitive, behavioral and neuropsychiatric changes that impair social function. Mild cognitive impairment (MCI) is an in-between state of normal ageing and dementia but does not significantly disrupt daily activities. It can progress to dementia. Newer biomarkers include CSF A β 42 level, pTau217, amyloid PET, Tau PET and FDG PET. Declining CSF A β 42 level and increasing plasma Tau 217 starts to occur about 20 years prior to symptom onset of dementia. So early detection is very crucial because, early treatment can halt the process by 3 years. MRI has become one of the most important tools not only in diagnosis but also in monitoring therapeutic response of patients with dementia. Semiquantitative scales- Medial Temporal Atrophy (MTA) scale & parietal lobe atrophy (Koedam scale) for AD, Fazeka scale for vascular dementia, Global cortical atrophy (GCA) scale have been quite useful in assessment of structural MRI. Nevertheless, for even greater precision other biomarkers need to be complemented along with MRI. The aim of treatment is to delay the progression of AD. Introduction of newer treatment by disease modifying drug/ monoclonal antibody (adecunamab and lecanemab), along with control of risk factors and symptomatic treatment (anti cholinesterase and NMDA receptor antagonist) at early stage are very crucial to delay the progression of AD.

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