Dementia 2019: Herbal Medicine Today: Clinical and Research Issues Rare diseases My Organization runs a Medical Pharmacy College in India by the name of MAK College of Pharmacy.

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Method: All case notes of patients who underwent 18 F-FDG-PET/MRI brain attending the Geriatric Clinic for 18 month period between January 2017 and June 2018 were retrospectively reviewed. Their socio-demographic details, MRI-brain finding, 18F- FDG-PET findings and comorbid illnesses were studied.

Results: A total of 21 patients underwent 18F-FDG-PET/MRI brain during study period. The mean age was 61.23, SD-8.6 years (range: 36–75 years). Among them 5 (23.8%) had Mild Cognitive Impairment (MCI) and 16 (76.2%) had dementia. Majority of patients had early onset cognitive decline (76.2%). Based on the pattern of hypometabolism, the MCI group had one patient each indicative of AD, Semantic-Frontotemporal dementia (Semantic-FTD), mixed Alzheimer's dementia (AD + FTD) and two patients had patterns suggestive of Behaviour Variant of FTD (Bv-FTD). In Dementia group the pattern of hypometabolism was indicative of Bv-FTD in seven, AD in four, Posterior Cortical Atrophy (PCA) in one, Semantic-FTD in one, Mixed AD-Diffuse Lewy Body Dementia (DLBD) in one and no specific pattern in two patients. MRI and 18 F-FDG-PET brain had concordance in 9 (56.26%) patients.

Discussion: 18F-FDG-PET/MRI helped in overall clinical diagnosis and management in 19 (90.5%) patients especially with early onset dementia. In MCI group it indicated underlying aetiology and in dementia group it helped in subtyping. Dementia isn't a specific disease. Instead, dementia describes a group of symptoms affecting memory, thinking and social abilities severely enough to interfere with daily functioning. Alzheimer's disease accounts for 60 to 80% of cases. Vascular dementia, which occurs after a stroke or small vessel disease, is the second most common dementia type. But there are many other conditions that can cause symptoms of dementia, including some that are reversible, such as thyroid problems and vitamin deficiencies.

Conclusion: The study supports the role of 18F-FDG-PET/MRI as an emerging diagnostic tool to assist in dementia evaluation in India.

Alzheimer's dementia (AD) is increasingly being recognized as one of the most important medical and social problems in older people in industrialized and non-industrialized nations Alzheimer's disease is characterized by the development of senile plaques and neurofibrillary tangles, which are associated with neuronal destruction, particularly in cholinergic neurons. To date, only symptomatic treatments exist for this disease, all trying to counterbalance the neurotransmitter acetyl choline degradation within synapses are the mainstay of therapy. Donepezil, rivastigmine, and galantamine are safe but have potentially bothersome cholinergic side effects. Three acetylcholinesterase inhibitors appear to be effective, currently available and have been approved for the treatment of mild to moderate AD. A further therapeutic option available for moderate to severe AD is memantine, an N-methyl-D-aspartate receptor noncompetitive antagonist. Treatments capable of stopping or at least effectively modifying the course of AD, referred to as 'disease-modifying' drugs, are still under extensive research. To block the progression of the disease they have to interfere with the pathogenic steps responsible for the clinical symp-

toms, including the deposition of extracellular amyloid β plaques and intracellular neurofibrillary tangle formation, inflammation, oxidative damage, iron deregulation and cholesterol metabolism In this review we discuss current symptomatic treatments and new potential disease-modifying therapies for AD that are currently being studied in phase I–III trials.