VISUAL MANIFESTATIONS IN ALZHEIMER’S DISEASE: A CLINIC-BASED STUDY FROM INDIA

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Introduction: Alzheimer's disease (AD) predominantly involves temporo-parietal and visual association areas of brain. Visual manifestations (VM) are also common in AD and cause significant socio-occupational dysfunction. Furthermore, the syndrome of posterior cortical atrophy is most commonly associated with AD pathology. Yet, conventional cognitive batteries do not specifically elaborate VM, which are less studied in typical AD.

Aims: To assess frequency and correlates of VM in AD

Methods: This study included AD patients attending a tertiary-level cognitive clinic in Kolkata, India, between January 2007 and December 2009, diagnosed as per DSM-IV criteria, based on history, clinical examination, and neuropsychological, biochemical, hematological and neuro-imaging data. Patients with prominent frontal lobe symptoms, focal neurodeficits, extra-pyramidal signs and significant vascular burden in MRI were excluded. Each patient was assessed by MMSE and Kolkata Cognitive Battery. VM were tested for field defect, hemineglect, object agnosia, prosopagnosia, simultanagnosia, alexia-without-agraphia and visuo-constructional and visuo-perceptual functions.

Results: From the total 215 patients evaluated in the study period, 63 were diagnosed as AD. Twenty had severe AD, precluding detailed evaluation. The other 43 (men=27) were all right-handed, aged 66.3 years (±10.13), symptomatic for 3.9 years (±2.3) and had MMSE scores of 12.9 (±5.83), in average. Thirty-nine (90.7%) patients had at least one VM. The three most common VM were constructional (88.3%), perceptual (65.1%) and face-recognition (44.1%) deficits. No patient had alexia-without-agraphia. VM were more frequent in those with MMSE < 10.

Conclusions: Further research of VM in AD is necessary regarding various its clinical, radiological and pathological aspects.