Practical suggestions on how to differentiate DLB from AD

Citation:


Using common cognitive tests

Palmqvist S (1), Hansson O, Minthon L, Londos E.

Author information:
(1) Clinical Memory Research Unit, Department of Clinical Sciences Malmö, Lund University, University Hospital MAS, Malmö, Sweden. sebastian.palmqvist@skane.se

OBJECTIVE: Dementia with Lewy bodies (DLB) is the second most common neurodegenerative dementia, but it is often underdiagnosed and mistaken for Alzheimer's disease (AD) with sometimes lethal consequences. Over 35 studies have established the differences between DLB and AD in neuropsychological tests, but none have provided easy interpretations of common tests suitable for the clinician. The aim of this study was to suggest practical interpretations of the Mini-Mental State Examination (MMSE), clock drawing, and cube-copying to identify DLB and differentiate it from AD.

METHODS: Thirty-three DLB patients were matched according to gender, MMSE, and age with 66 AD patients. The median MMSE score was 24. Easy interpretations of the tests, including the MMSE orientation subscore, were sought for.

RESULTS: The identified criteria to separate DLB from AD were (1) the MMSE orientation score x 3 ≥ the total MMSE score, (2) an impaired clock drawing, and (3) a non-3D cube-copying. If (1) was fulfilled, the sensitivity and specificity were 100 and 57% in patients with MMSE 21-27. If (1) and (2) were fulfilled in patients with MMSE 21-27, the sensitivity and specificity were 93 and 70%. If at least two of the three criteria were fulfilled, the sensitivity was 85%, and the specificity 75% regardless of MMSE score.

CONCLUSION: If the orientation score x 3 ≥ the total MMSE score together with an impaired clock drawing and possibly a non-3D cube-copying, the patient should be thoroughly investigated according to the DLB consensus criteria.

Copyright (c) 2009 John Wiley & Sons, Ltd.


PMID: 19347836 [PubMed - indexed for MEDLINE]