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Rate of change of functional abilities in frontotemporal dementia

Eneida Mioshi[1,2], John Hodges[1,3]
[1]Prince of Wales Medical Research Institute, Sydney, Australia, [2]MRC-Cognition and Brain Sciences Unit, Cambridge, United Kingdom, [3]School of Medical Sciences, University of New South Wales, Sydney, Australia

Background: frontotemporal dementia (FTD) causes progressive change in everyday functioning. The rate of decline in activities of daily living (ADLs) has not been investigated for the three major FTD variants. This study aimed to (1) examine changes on the Disability Assessment for Dementia (DAD) in the three FTD variants [behavioural variant FTD (bvFTD), semantic dementia (SemDem) and progressive nonfluent aphasia (PNFA)]; (2) identify if deterioration of ADL abilities would be more prominent in initiation, planning or execution; (3) see if bvFTD phenocopy patients can be identified by these measures and (4) verify if changes in DAD and ACE-R scores are associated.
Methods: A total of 72 DAD assessments were analysed; 36 at baseline and 36 at follow up (bvFTD=16, subdivided into bvFTD pathological and phenocopy on the basis of their presenting MRIs; SemDem=11; PNFA=9).
Results: True bvFTD pathological, SemDem and PNFA groups showed significant decline on the DAD after 12 months, whereas on the ACE-R only the bvFTD pathological group reached significance. In terms of subcomponents of ADLs, SemDem patients had significant decline in planning, whereas the bvFTD pathological group declined significantly in all subcomponents; PNFA was intermediate. The decline in DAD and ACE-R scores were significantly correlated.
Conclusions: FTD variants show differential annual rates of functional decline. Those with the bvFTD phenocopy syndrome can be clearly differentiated within a year of presentation. Patients with PNFA show marked decline that is not easily explained by their language deficits. The rate of decline should be taken into consideration when discussing prognosis.