

PSP and FTD: comparison of motor, cognitive and behavioural features

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Introduction: Frontotemporal degeneration (FTD) and Progressive Supranuclear Palsy (PSP) are both tauopathies which can sometimes present overlapping clinical features.

Objective: The aim of this study is to compare motor and cognitive performances between FTD and PSP patients.

Methods: We collected motor assessments (including MDS-UPDRS part III, evaluation of eye movements, dystonia and myoclonus) in 15 consecutive patients within the FTD spectrum (9 with behavioural variant, 5 with PPA, 2 with logopenic and semantic variants, 1 patient with FTD-MND) and 15 patients with PSP (14 with Richardson’s syndrome and 1 with PSP with predominant parkinsonism). All patients performed an extensive cognitive/behavioural battery of tests.

Results: FTD and PSP did not differ in terms of demographic features. As expected, PSP showed a greater impairment in saccadic eye movements ($p<0.05$). As for the movement disorders evaluation, PSP showed more frequently face dystonia, while FTD presented more frequently rest and stimulus-sensitive myoclonus ($p<0.05$). MDS-UPDRS part III was greater in PSP ($p<0.05$). As for the cognitive evaluation, FTD presented greater impairment in global cognitive status (assessed with MMSE and MOCA), memory and language (evaluated with deferred recall of Ray’s 15 words and repetition of words and auditory understanding of words, respectively). As for the behavioural evaluation (performed with the Neuropsychiatric Inventory), FTD and PSP failed to disclose major differences except for apathy which was more frequent in FTD ($p<0.05$).

Conclusions: Despite being two different diseases, FTD and PSP share similar cognitive/behavioural impairment. PSP present a greater impairment in ocular movements and more frequent face dystonia, while myoclonus is more common in FTD.