

Apathy and impulsivity overlap in Parkinson's disease: a case for transdiagnostic approaches in FTD

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State of the Art: In line with contemporary transdiagnostic approaches, clinical features of FTD such as apathy and impulsivity span diseases ranging from tauopathies, vascular, and synucleinopathies. Some view apathy and impulsivity as opposite ends of the motivational spectrum. Recent evidence in 887 mid-stage Parkinson disease (PD) individuals argues against this view (Scott et al., 2020). We tested this hypothesis in newly diagnosed PD individuals by looking at co-occurrence of apathy and impulsivity symptoms.

Methodology: We examined baseline data from levodopa-naive, newly diagnosed individuals with PD (n=485) from the Parkinson's Progression Markers Initiative (PPMI) database. Mood and motivation disturbances were classified using recommended cutoff scores from apathy and impulse control (ICD) self-report measures. Prevalence of unique and overlapping mood and motivation symptoms were computed.

Results: Prevalence rates include 22.5% with ICD, 17.5% with apathy, and 6% with both apathy and ICD. More than a third of individuals with apathy (34.1%) reported ICDs and 26.6% of individuals with ICD reported apathy. Motor severity scores (UPDRS-3) were worst among those with both apathy and ICD.

Conclusions: We found that motivational disturbances were common in new onset unmedicated PD patients, though apathy was relatively less prevalent and ICD's more prevalent compared to more advanced PD (Scott, 2020). Findings of symptom overlap in early PD further challenge the motivational spectrum hypothesis. In PD, progressive dopamine depletion of nigro-striatal and mesolimbic regions may be contributory. More broadly, motivation disturbances are frequent across distinct neurodegenerative diseases including FTD, which underscores the need for understanding underlying mechanisms.

Conflicts of interest

N/A