



Correction: Heterogeneity of cognitive progression and clinical predictors in Parkinson's disease—subjective cognitive decline

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Published online: 26 April 2025
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Correction: Journal of Neurology (2025) 272:246
<https://doi.org/10.1007/s00415-024-12808-0>

In the original version of this article, abstract was missing and should have read

Background Parkinson's Disease (PD)-associated subjective cognitive decline (PDSCD) is defined as cognitive complaints without objective cognitive impairment. Based on most studies, it is associated with a greater risk of cognitive decline and may represent a prodromal stage of cognitive impairment.

Methods The main objectives are to identify cognitive progression patterns and clinical predictors of worse cognitive decline within a large PD-SCD cohort with a 4-year follow-up. All patients belong to the prospective observational multicenter study COPPADIS.

Results A total of 198 PD-SCD subjects were analyzed. Mean age was 60.9, mean disease duration 5.2, and mean PD-Cognitive Rating Scale (PD-CRS) 97.6. Subjects were classified as Progressors if their Reliable Change

Index was ≤ -1.64 at year 4, and as non-Progressors if it was > -1.64 (-1.64 corresponded to -16 on the PD-CRS). Progressors had significantly higher age, Movement Disorders Society-Unified PD Rating Scale (MDS-UPDRS) III, levodopa equivalent daily-dose, Non-Motor Symptom Scale total score, memory-related cognitive complaints, and prevalence of REM-sleep behavior disorder (RBD) at baseline. A linear mixed-effects model showed divergent cognitive trajectories between Progressors and non-Progressors (estimate = -26.8 ; $p < 0.001$), with no differences in motor trajectories. In the binary regression model, age (OR = 1.09; $p = 0.001$), MDS-UPDRS III (OR = 1.05, $p = 0.008$), and RBD (OR = 2.55, $p = 0.010$) at baseline were independent predictors of cognitive progression.

Conclusions Subjects with PD-SCD do not consistently show cognitive decline, but rather exhibit a heterogeneous progression. Age, MDS-UPDRS III and RBD significantly increase the risk of a more aggressive cognitive phenotype. Future research on biomarkers will help explore additional cognitive predictors in PD-SCD.

The original article has been corrected.

The original article can be found online at <https://doi.org/10.1007/s00415-024-12808-0>.

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