



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

Jon Rodríguez-Antigüedad^{1,2,3,4} · Saül Martínez-Horta^{1,2,3,4} · Arnau Puig-Davi^{1,2,3,4} · Andrea Horta-Barba^{1,2,3,4} · Javier Pagonabarraga^{1,2,3,4} · Teresa de Deus Fonticoba⁵ · Silvia Jesús⁶ · Marina Cosgaya⁷ · Juan García Caldentey⁸ · María Asunción Ávila-Rivera⁹ · Nuria Caballol⁹ · Inés Legarda¹⁰ · Jorge Hernández Vara^{4,11} · Iria Cabo¹² · Lydia López Manzanares¹³ · Isabel González Aramburu¹⁴ · Víctor Gómez Mayordomo¹⁵ · Jessica González Ardura¹⁶ · Julio Dotor García-Soto¹⁷ · Carmen Borrué¹⁸ · Berta Solano Vila¹⁹ · María Álvarez Sauco²⁰ · Lydia Vela²¹ · Sonia Escalante²² · Esther Cubo²³ · Zebenzui Mendoza²⁴ · Isabel Pareés²⁵ · Pilar Sánchez Alonso²⁶ · María G. Alonso Losada²⁷ · Nuria López Ariztegui²⁸ · Itziar Gastón²⁹ · Javier Ruiz Martínez³⁰ · María Teresa Buongiorno³¹ · Carlos Ordás³² · Caridad Valero³³ · Víctor Puente³⁴ · Mónica Kurtis³⁵ · Marta Blázquez Estrada³⁶ · Pablo Martínez-Martín⁴ · Pablo Mir^{4,6} · Diego Santos-García^{37,38} · COPPADIS Study Group³⁸ · Jaime Kulisevsky^{1,2,3,4,38} 

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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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Authors and Affiliations

Jon Rodríguez-Antigüedad^{1,2,3,4} · Saül Martínez-Horta^{1,2,3,4} · Arnau Puig-Davi^{1,2,3,4} · Andrea Horta-Barba^{1,2,3,4} · Javier Pagonabarraga^{1,2,3,4} · Teresa de Deus Fonticoba⁵ · Silvia Jesús⁶ · Marina Cosgaya⁷ · Juan García Caldentey⁸ · María Asunción Ávila-Rivera⁹ · Nuria Caballol⁹ · Inés Legarda¹⁰ · Jorge Hernández Vara^{4,11} · Iria Cabo¹² · Lydia López Manzanares¹³ · Isabel González Aramburu¹⁴ · Víctor Gómez Mayordomo¹⁵ · Jessica González Ardura¹⁶ · Julio Dotor García-Soto¹⁷ · Carmen Borrué¹⁸ · Berta Solano Vila¹⁹ · María Álvarez Sauco²⁰ · Lydia Vela²¹ · Sonia Escalante²² · Esther Cubo²³ · Zebenzui Mendoza²⁴ · Isabel Pareés²⁵ · Pilar Sánchez Alonso²⁶ · María G. Alonso Losada²⁷ · Nuria López Ariztegui²⁸ · Itziar Gastón²⁹ · Javier Ruíz Martínez³⁰ · María Teresa Buongiorno³¹ · Carlos Ordás³² · Caridad Valero³³ · Víctor Puente³⁴ · Mónica Kurtis³⁵ · Marta Blázquez Estrada³⁶ · Pablo Martínez-Martín⁴ · Pablo Mir^{4,6} · Diego Santos-García^{37,38} · COPPADIS Study Group³⁸ · Jaime Kulisevsky^{1,2,3,4,38} 

✉ Jaime Kulisevsky
jaime.kulisevsky@uab.cat

- ¹ Medicine Department, Universitat Autònoma de Barcelona (UAB), Barcelona, Spain
- ² Movement Disorders Unit, Neurology Department, Hospital de la Santa Creu i Sant Pau, Mas Casanovas 90, 08041 Barcelona, Spain
- ³ Institut d'Investigacions Biomèdiques-Sant Pau (IIB-Sant Pau), Barcelona, Spain
- ⁴ Centro de Investigación Biomédica en Red-Enfermedades Neurodegenerativas (CIBERNED), Madrid, Spain
- ⁵ Neurology Department, Complejo Hospitalario Universitario de Ferrol (CHUF), A Coruña, Spain
- ⁶ Movement Disorders Unit, Neurology and Clinical Neurophysiology Department, Instituto de Biomedicina de Sevilla, Hospital Universitario Virgen del Rocío/CSIC, Universidad de Sevilla, Seville, Spain
- ⁷ Neurology Department, Hospital Clínic de Barcelona, Barcelona, Spain
- ⁸ Centro Neurológico Oms 42, Neurology Department, Palma, Spain
- ⁹ Neurology Department, Consorci Sanitari Integral, Hospital Moisès Broggi Sant Joan Despí, Barcelona, Spain
- ¹⁰ Neurology Department, Hospital Universitario Son Espases, Palma, Spain
- ¹¹ Neurology Department, Hospital Universitario Vall d'Hebron, Barcelona, Spain
- ¹² Neurology Department, Complejo Hospitalario Universitario de Pontevedra (CHOP), Pontevedra, Spain
- ¹³ Neurology Department, Hospital Universitario La Princesa, Madrid, Spain

- ¹⁴ Neurology Department, Hospital Universitario Marqués de Valdecilla-IDIVAL, Santander, Spain
- ¹⁵ Neurology Department, Institute of Neuroscience, Vithas Madrid La Milagrosa University Hospital, Vithas Hospital Group, Madrid, Spain
- ¹⁶ Neurology Department, Hospital de Cabueñes, Gijón, Spain
- ¹⁷ Neurology Department, Hospital Universitario Virgen Macarena, Seville, Spain
- ¹⁸ Neurology Department, Hospital Infanta Sofía, Madrid, Spain
- ¹⁹ Neurology Department, Institut d'Assistència Sanitària (IAS), Institut Català de la Salut, Girona, Spain
- ²⁰ Neurology Department, Hospital General Universitario de Elche, Elche, Spain
- ²¹ Neurology Department, Fundación Hospital de Alcorcón, Madrid, Spain
- ²² Neurology Department, Hospital de Tortosa Verge de la Cinta (HTVC), Tortosa, Tarragona, Spain
- ²³ Neurology Department, Complejo Asistencial Universitario de Burgos, Burgos, Spain
- ²⁴ Neurology Department, Hospital Universitario de Canarias, San Cristóbal de la Laguna, Santa Cruz de Tenerife, Spain
- ²⁵ Neurology Department, Hospital Universitario Ramón y Cajal, IRYCIS, Madrid, Spain
- ²⁶ Neurology Department, Hospital Universitario Puerta de Hierro, Madrid, Spain
- ²⁷ Neurology Department, Hospital Álvaro Cunqueiro, Complejo Hospitalario Universitario de Vigo (CHUVI), Vigo, Spain
- ²⁸ Neurology Department, Complejo Hospitalario de Toledo, Toledo, Spain

- ²⁹ Neurology Department, Complejo Hospitalario de Navarra, Pamplona, Spain
- ³⁰ Neurology Department, Hospital Universitario Donostia, Donostia, Spain
- ³¹ Neurology Department, Hospital Universitari Mutua de Terrassa, Terrassa, Barcelona, Spain
- ³² Neurology Department, Hospital Rey Juan Carlos, Madrid, Spain
- ³³ Neurology Department, Hospital Arnau de Vilanova, Valencia, Spain
- ³⁴ Neurology Department, Hospital del Mar, Barcelona, Spain
- ³⁵ Neurology Department, Hospital Ruber Internacional, Madrid, Spain
- ³⁶ Neurology Department, Hospital Universitario Central de Asturias, Oviedo, Spain
- ³⁷ Neurology Department, Complejo Hospitalario Universitario de A Coruña (CHUAC), INIBIC, A Coruña, Spain
- ³⁸ Fundación Española de Ayuda a La Investigación en Enfermedades Neurodegenerativas y/o de Origen Genético, Oleiros, Spain