

**PD-MCI in newly diagnosed patients: preliminary data**

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*Introduction:* Cognitive impairment represents one of the most disabling non-motor symptoms of Parkinson's disease (PD). Although it is common to think that it affects the advanced stages of the disease, cognitive impairment can already concern the early stages [1]. However, the prevalence and subtypes of MCI vary depending on the cognitive tests administered and the criteria used.

*Objective:* This preliminary study aims to evaluate the prevalence and clinical characteristics of MCI in patients with newly diagnosed Parkinson's disease by applying the level II criteria proposed by the task force of the Movement Disorder Society (MDS) [2].

*Methods:* A level II neuropsychological assessment was performed on 36 newly diagnosed Parkinson's disease patients belonging to the Movement Disorders Clinic of Trento. They do not have other neurological or psychiatric pathologies.

*Results:* Using 2 sd criteria, 11% of patients show PD-MCI (all multidomain type) from the II-level neuropsychological assessment, while the prevalence increased to 30% using the 1.5 sd criteria. Only two patients (5% of the sample) show PD-MCI from the I level assessment (MoCA). Using 2 sd criteria, the PD-MCI group is comparable to the PD cognitive unimpaired (CU) group for age ( $t(34)=-0.43$ ,  $p>0.05$ ), education ( $t(34)=0.66$ ,  $p>0.05$ ), sex ( $\chi^2(1)=1.39$ ,  $p>0.05$ ), motor phenotype ( $\chi^2(1)=0.51$ ,  $p>0.05$ ) and motor lateralization at onset ( $\chi^2(1)=0.01$ ,  $p>0.05$ ). However, patients with PD-MCI compared to PD-CU have a heterogeneous disease severity with H&Y ranging from 1 to 3 (vs. 75% of PD-CU with H&Y=1;  $\chi^2(3)=12.36$ ,  $p=0.006$ ) and a higher LEDD ( $t(34)=-3.29$ ,  $p=0.02$ ).

*Discussion and Conclusion:* Preliminary data support the evidence that MCI may already characterize the early stages of Parkinson's disease and that the prevalence varies depending on level assessment (I or II) and criteria used (2 or 1.5 sd). Finally, our results suggest the need to increasingly introduce, from a multidisciplinary perspective, level II neuropsychological assessment in the diagnostic and care process of the person with Parkinson's disease.

**References:**

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