

Impulse control disorders and compulsive behaviours in Parkinson's disease. Results from the COPPADIS Study Cohort.

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Background: Impulse control disorders (ICDs) and compulsive behaviors (CBs) are included as non-motor symptoms in PD and they are closely influenced by the dopaminergic replacement therapy. We aimed to analyze the existence of ICDs and CBs in Parkinson's disease (PD) patients compared to control subjects and to assess the clinical features in the PD group as well as the relationship between these disorders and the dopaminergic treatment. Methods: The data correspond to the baseline evaluation of the COPPADIS-2015 Study, an observational, descriptive, 5-year follow-up, national (Spain), multicenter, evaluation study (Santos García et al. BMC Neurol 2016;16:26). We used the validated test QUIP-RS for screening of ICDs and CBs (cutoff points: gambling ≥ 6 , buying ≥ 8 , sex ≥ 8 , eating ≥ 7 , Hobbyism-punding ≥ 7). For dopaminergic dysregulation syndrome we accounted for the investigator criterion. In addition to analysis of demographic data from both groups (patients and controls), clinical features and treatment-related data were analyzed in PD patients. The statistics used were Chi-Square, student's t-test and binary logistic regression and multivariate linear regression adjusted by confounder factors. Results: 700 PD patients (mean ages 62.77 ± 9.03 years, 59.1% males) and 213 controls (mean age 61.16 ± 8.45 years, 47.4% males) were included. ICDs and CBs were more frequent in PD than in controls (ICDs: 11.28% vs 1.42; CBs: 8.42% vs 1.42%; $p < 0.001$). PD patients with either ICDs and CBs had more frequent previous personal and family history of ICDs, premorbid personality related to impulsivity and treatment on antidepressants ($p < 0.05$). In the PD group, ICDs positive patients presented with a younger age at disease onset, more frequent history of previous ICDs and premorbid personality ($p < 0.05$). Besides, ICDs positive patients showed higher punctuation in UPDRS III in off and UPDRS IV adjusted by years of evolution, age and age at disease onset ($p < 0.05$). Treatment with dopamine agonists increased the risk to suffer ICDs and was influenced by the type of drug and dose ($p < 0.05$). Ropirinoles had the highest impact on ICDs and rotigotine had the lowest. Conclusions: ICDs and CBs are more frequent in PD. Some demographic characteristics could influence on them. Dopamine agonists have a prominent effect on ICDs, which may be influenced by the dose and type of this kind of drugs.