

Impulse control disorders in Parkinson's disease patients treated with dopamine agonists

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Introduction: Impulse control disorders (ICDs) are a group of complex behavioral disturbances, characterized by the occurrence of repetitive and maladaptive behaviors that may be harmful to the individual or to others. ICDs such as pathological gambling (PG), hypersexuality (HS), compulsive eating and shopping (CE, CS) often occur as a non-motor complication of Parkinson's disease (PD) following, but not limited to, dopamine replacement therapy (DRT). Dopamine Agonists (DA) are the main risk factor but other factors include male sex, younger age or younger age at PD onset, a history of ICD symptoms, history of substance use or bipolar disorder.

Objective: We studied a cohort of patients with diagnosis of PD treated with DA, with former or current ICDs.

Methods: Subjects underwent neurological assessment at Parkinson Unit, Azienda Ospedaliero Universitaria Careggi, Florence in the period from January 2022 to January 2023.

Results: We describe 53 patients (32 Males, 21 Females) with former or current ICDs at the time of evaluation. Mean age at the time of the ICD onset was 66 (SD ± 8.78). The most frequent disorder was CE with 23 patients (43,4%). Thirteen patients (24,5%) developed CS, 12 (22,6%) with PG, 9 (16,9%) with HS, 4 (7,5%) with Hobbysm, 2 (3,7%) with Punding and in the end only one (1,8%) with Hoarding. Fourty-two patients developed only one ICD while 11 patients developed two ICDs. Twenty-six of these patients were treated with Pramipexole (mean 112.6 LEDD), 18 with Ropinirole (mean 187.1 LEDD), 6 with Rotigotine (mean 120 LEDD), 1 with Pramipexole and Rotigotine (mean 270 LEDD) and 1 with Pramipexole and Ropinirole (mean 185 LEDD). Mean time of ICD onset from the initiation of therapy with DA was 5.82 years (SD±4.12).

Conclusions: This study wants to describe the phenotypic spectrum of ICDs in PD patients.