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Late Breaking Abstracts

LB 4

Dopaminergic Therapy and Impulse Control Disorders in Parkinson's Disease: Top Line Results of a Cross-Sectional Study of Over 3,000 Patients

Authors: Daniel Weintraub, MD, Juergen Koester, PhD, Marc N. Potenza, MD, PhD, Andrew D. Siderowf, MD, MSCE, Mark A. Stacy, MD, Jacqueline Whetteckey, MD, Glen R. Wunderlich, PhD, and Anthony E. Lang, MD, FRCPC, for the DOMINION Study Group

Objective: To ascertain the prevalence estimates of four impulse control disorders (ICDs; problem/pathological gambling, compulsive buying, compulsive sexual behavior, and binge-eating disorder) in treated Parkinson's disease (PD) patients and examine the association of ICDs with different PD medications.

Background: Case reporting and preliminary cross-sectional studies in PD have suggested an association between dopamine agonist (DA) treatment and ICDs. However, studies to date have typically assessed convenience samples of patients, have had relatively small sample sizes, and have not concurrently assessed for all commonly reported ICDs in PD.

Methods: Patients with idiopathic PD, age range 30-75 years, were recruited for study participation in the context of routine clinical care based on predetermined, site-specific recruitment plans designed to minimize selection bias. Subjects were assessed for a current (past 6 months) ICD using a modified Massachusetts Gambling Screen (MAGS) for problem/pathological gambling, a modified Minnesota Impulsive Disorders Interview (MIDI) for compulsive sexual behavior and buying, and DSM-IV research criteria for binge-eating disorder. Odds ratios with 95% confidence intervals were calculated and a Cochran-Mantel-Haenszel test was performed for comparing of ICD frequencies in DA versus non DA-treated groups and pramipexole- versus ropinirole-treated groups.

Results: A total of 3090 patients (64.1% male; mean age =63.8 years; DA treatment =66.0%) at 46 sites in the United States (N=33) and Canada (N=13) completed the initial assessment. One or more current ICDs were identified in 13.6% of patients. ICD patients were slightly younger than non-ICD patients (mean age =60.2 vs. 64.4 years, respectively; $P<.001$) and were more likely to have a self-reported family history of gambling problems (7.1% vs. 3.6%, respectively; $P<.001$); there were no between-group differences in gender ($P=.71$) or disease severity as measured by Hoehn and Yahr stage ($P=.93$). ICDs as a group were more common in DA-treated than non DA-treated patients (17.1% versus 6.9%, respectively; odds ratio [95% CI] =2.72 [2.08;3.54], $P<.001$). This same pattern was observed for each of the ICDs evaluated. Overall ICD frequency for DA treatment alone versus DA plus levodopa treatment was similar (14.1% vs. 17.7%, respectively; $P=.10$). Among individual DAs, there was no difference in overall ICD frequency for pramipexole- and ropinirole-treated patients (17.7% vs. 15.5%, respectively; odds ratio [95% CI] =1.22[0.94;1.57], $P=.14$). In DA-treated patients, the most common ICD was compulsive buying (7.2%), followed by problem/pathological gambling (6.4%; pathological gambling =3.5%), binge-eating (5.6%), and compulsive sexual behavior (4.4%).

Conclusions: In this study the DA-treated group had a two- to three-fold elevated odds of having at least one of the four commonly reported ICDs in PD compared with the non DA-treated group, a finding which applied to each of the ICDs assessed. The elevated odds represented a class, as opposed to a specific medication, finding. Although previous ICD research in PD has focused on pathological gambling, a broad range of ICDs is observed in PD patients. Additional analyses will examine other clinical correlates of ICDs in this patient population.

Keywords: impulsive, compulsive, gambling, buying, eating, sexual behaviors

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Restless Legs Syndrome In Multiple Sclerosis: A Case Control Study

Authors: G Cossu., M. Deriu, A. Molari, A. Mereu, P. Ferrigno, D. Manca, M. Melis, P. Contu,

Objective: our aim is to explore the frequency of RLS in patients affected by Multiple Sclerosis and then establish whether RLS could be considered a recurrent symptom in MS.

Background: the prevalence of Restless legs syndrome (RLS) in Multiple Sclerosis (MS) is a current and debated matter.

Patients and Methods: In a period between January and December 2007, we enrolled 202 consecutive MS-patients (135 females and 67 males). All of them filled a structured questionnaire according to IRLSSG criteria. Patients who fulfilled the four criteria were called back and accurately examined by a neurologist to verify the effective presence of RLS. The same methods were applied to enrol 212 healthy control subjects matched for sex and age.

Results: 91 MS-patients (45%) responded positively to the questionnaires. The diagnosis of RLS was carried out in 29 subjects (14,6%) during the visit. Among the healthy control subjects, only 6 (2.8 %) really fulfilled the four IRLSSG criteria. The risk of MS patients to present RLS was significantly higher (OR.5.76 p:0.00002) than the general population. None of them was affected by iron deficiency, chronic renal insufficiency, diabetes mellitus. The 62 remaining patients presented numbness and weakness of the legs not suggestive for RLS by clinical examination.

Conclusions: Our findings confirm a significant correlation between MS and RLS. In our opinion, MS must be definitively included among RLS causes. This work was supported by an unrestricted educational grant from Boheringer Ingheleim.