Parkinson's Tx May Raise Risk of Impulse Control

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CHICAGO — Evidence continues to mount that dopaminergic therapy increases the odds of impulse control disorders in patients who have Parkinson's disease.

Dopamine agonist (DA)-treated patients had two- to threefold elevated odds of having a current impulse control disorder (ICD), compared with non–DA-treated patients (17% vs. 7%) in an international, cross-sectional study of 3,090 patients with idiopathic Parkinson's disease.

This pattern was observed across all four impulse control disorders assessed: pathological gambling (3.5% vs. 1.6%), compulsive sexual behavior (4.4% vs. 1.7%), compulsive buying (7.2% vs. 2.9%), and binge-eating disorder (5.6% vs. 1.7%), Dr. Daniel Weintraub and associates reported in a late-breaking poster at the 12th International Congress of Parkinson's Disease and Movement Disorders.

Previous case reports and cross-sectional studies have suggested an association between DA treatment and ICDs in Parkinson's disease. However, those previous reports have typically assessed convenience samples of patients, have had relatively small sample sizes, and have not concurrently assessed for all commonly reported ICDs in Parkinson's, according to Dr. Weintraub, who is a psychiatrist affiliated with the University of Pennsylvania, Philadelphia.

Patients in the current study were prospectively recruited from 46 movement disorder centers in the United States and Canada, and assessed using a modified Massachusetts Gambling Screen, a modified Minnesota Impulsive Disorders Interview for compulsive sexual behavior and buying, and DSM-IV Text-Revised proposed research criteria for binge eating.

Their mean age was 64 years. Four hundred and twenty patients (14%) had at least one current ICD, and 36% of patients with an ICD had more than one.

According to Dr. Weintraub, ICD frequencies were similar in patients who were treated with pramipexole, ropinerole, and pergolide, suggesting that DA treatment as a class might be a risk factor for ICD development in Parkinson's disease, the authors concluded.

Patients should be notified in advance that impulse control disorders are a potential adverse event associated with dopamine agonists and levodopa.

An ICD was present in 18% of the patients taking both a DA and levodopa, 14% of the patients taking a DA without levodopa, and 7% of the patients taking levodopa without a DA.

Based on the overall findings, Dr. Weintraub said that physicians should notify patients in advance that ICDs are a potential adverse event associated with dopamine-agonist and levodopa treatment, and should conduct routine questioning in the context of clinical care.

"That may help identify patients very early in the process, so adjustments to treatment can be made," he said in an interview. "Once someone has a full-blown disorder, different treatment strategies at this point include decreasing the dosage of the presumed offending agent, switching to a different class of medication, or coming off that medication completely," he said. "If patients are appropriate for deep brain stimulation, that often enables them to take a lower dose of the medication."

Dr. Weintraub acknowledged that ICDs have been reported as a complication of deep brain stimulation, but said most patients with an ICD prior to surgery do better after surgery, probably because of decreased medication.

In a logistic regression analysis, independent risk factors for ICD development included: age of 65 years or younger, DA treatment, and higher DA dosage (greater than 150 mg), levodopa treatment, and higher levodopa dosage (greater than 450 mg), not being married, and self-reported family history of gambling problems.

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