

## Pathological Gambling in a Bipolar Patient Treated with Pramipexole

*To the Editor:* There is an increasing use of pramipexole in the treatment of bipolar depression. However, there are no reports of pathological gambling and sleep attacks, two potential adverse effects associated with the use of dopaminergic agonists in Parkinson's disease, in the psychiatric setting. Pramipexole, a D<sub>2</sub>/D<sub>3</sub> selective agonist,<sup>1</sup> was the drug involved in 68% of the pathological gambling and sleep attacks cases reported in Parkinson's disease.<sup>1</sup> These side effects were not identified in the two positive double-blind trials for bipolar depression,<sup>2,3</sup> nor in a recent review on the use of pramipexole in psychiatry.<sup>4</sup>

### Case Report

Mr. G is a 56-year-old Caucasian man who fulfilled DSM-IV criteria for bipolar disorder II and did not present any background for pathological gambling. At the age of 54, he attended our center with a mixed episode with strong suicidal ideation. He had been treated with antidepressants in monotherapy for 4 years for misdiagnosed unipolar depression. Initially, electroconvulsive treatment was ordered, and this obtained partial improvement. After that, pharmacological treatment was initiated, combining, progressively, lithium, lamotrigine, and quetiapine with low doses of selective serotonin reuptake inhibitor. The treatment

was successful in decreasing overall severity, but it failed to achieve mood stability.

After 14 months, Mr. G relapsed into a severe major depressive episode with suicidal ideation. During this episode, he was receiving lamotrigine, 200 mg/day; lithium carbonate, 0.8 meq/lts; quetiapine, 200 mg/day, and citalopram, 10 mg/day. At that time, pramipexole was included, starting with 0.375 mg/day, upwardly titrating it to 1.25 mg/day in 3 weeks, while gradually withdrawing citalopram. The patient experienced significant improvement, achieving sustained mood stability. During the 35th week of pramipexole treatment, he progressively started to suffer sleep attacks, and, at Week 44, he suddenly developed severe, pathological casino gambling. These side effects started and continued in euthymia, without disturbances in sleep cycle or any changes in mood state and motor activity. Pramipexole was withdrawn and sleep attacks improved, but the pathological gambling prevailed for up to 8 weeks after this drug was stopped, requiring therapeutic company and causing familiar problems and significant loss of money. In this context, 150 mg of bupropion was incorporated into treatment, which produced an abrupt extinction of pathological gambling after 72 hours. The patient continued to be stable for 2 months, until he suspended bupropion intake without medical authorization. Thirty days later, he developed serious pathological gambling again; this was controlled when bupropion treatment

was reinstated. At present, the patient continues to be stable without pathological gambling for over 80 weeks.

### Discussion

In agreement with the available data, in the present case study pramipexole associated with mood stabilizers was particularly efficient in the treatment of a bipolar II patient who had been presenting a torpid evolution. However, to our knowledge, this is the first time that sleep attacks and severe pathological gambling have been observed in the treatment of bipolar disorder with pramipexole. These side effects started after 35 weeks of pramipexole treatment. For that reason, we could speculate that, as longer treatments employing this drug become more frequent, there will be an increased incidence of these effects. On the other hand, the fact that a dopaminergic agonist with higher potency at D<sub>3</sub> receptors produced pathological gambling, and that a therapeutic scheme with a nonselective dopamine agonist abruptly interrupted it, may add evidence to the idea of an imbalance between the dopaminergic receptors in the pathophysiology of complex behavior disturbances.<sup>5</sup>

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