# A CASE OF IATROGENIC GAMBLING

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### Summary

Gambling is considered a side effect of dopamine-agonist drugs.

We report the case of a patient affected by Parkinson's Disease, who developed depressive syndrome and compulsion to gambling during the therapy based on a daily dose of 2x3 - 0.7 mg tablets of pramipexole.

The simptoms of gambling and depressive syndrome disappared after pramipexole discontinuation.

This is an interesting case, while not serious, so surveillance is of primary importance in bringing up to date our knoledge of possible adverse effects of drugs.

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#### Introduction

Gambling is part of the impulse control disorders and is considered a volontary adaptative disorder, not necessarily desired or accepted; gambling is characterized by pleasure during the act, but by displeasure after the act, leaving a burder of self-distructive implications. Gambling has much in common with abusive behavior in general<sup>1</sup>. Many cases of iatrogenic gambling have been reported in international literature as a result of drugs containing sintetic dopamine agonists, notably pramipexole and ropinirole.

#### **Case Report**

The case under observation regards a 58 years old male affected by Parkinson's Disease for approximately 2 years, undergoing therapy since 01.07.2004 with pramipexole 0.7 mg tablets, 2 tablets 3 times daily.

During the month of February 2006 the patient gradually began to develop a depressive syndrome and a compulsive syndrome regarding gambling.

The situation, diagnose by his Doctor, was not considered particularly serious, did not require hospitalization and was resolved positively by a suspension of the above therapy and a substitution with other anti-Parkinson drugs.

A causality assessment of the adverse event revealed a probable (score=4 as result after application of Naranjo method<sup>2</sup>) association of gambling with pramipexole..

The only simultaneous therapy is perindopril administered since 2003, but existing literature reports no farmacological interaction between this and pramipexole.

#### Discussion

A methodical review of international literature has revealed a number of similar cases, identifying other studies in which gambling has been related to specific drugs used in the treatment of Parkinson's Disease.

Dodd et Al., from 2002 to 2004 identified 11 patients affected with gambling pathology and 9 of these were taking pramipexole and 2 were taking ropinirole<sup>3</sup>.

Regarding the depressive syndrome, no cause and effect has been demonstrated between its insurgence and the use of this drug, since approximately 40% of Parkinson patients manifeste a least one episode of depression in the course of their illness; furthermore, the endogen depression of Parkinson's Disease may be alternatively over- or understimated.

Singh et At. affirm that pramipexole and ripinirole present antidepressive properties as a consequence of the disensitisation and/or potentialization of dopaminergic receptors  $D_2/D_3^4$ .

Surveillance is of primary importance in bringing up to date our knoledge of possible adverse effects of drugs.

## References

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