

Spontaneous Ejaculations Associated with Aripiprazole Aripiprazolle İlişkili Spontan Ejakülasyonlar

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ABSTRACT

Sexual side effects are common with antipsychotic use. Spontaneous ejaculations without sexual arousal have been previously described with several typical and atypical antipsychotics. We report the case of a man who had spontaneous ejaculations after stopping risperidone and starting 30 mg/day aripiprazole. Spontaneous ejaculations ceased 3 days after decreasing the aripiprazole dose to 15 mg/day. He denied sexual fantasies or increased sexual desire during the period in which he had spontaneous ejaculations. The partial agonistic effect of aripiprazole on D2 receptors may have augmented the mesolimbic

dopaminergic pathway, which was suppressed by risperidone, causing spontaneous ejaculations in this patient. Serotonergic effects of aripiprazole should also be considered. This unusual side effect should be questioned, particularly in patients who receive aripiprazole after D2-blocking antipsychotics; otherwise, this side effect may cause embarrassment and noncompliance.

Keywords: Aripiprazole, spontaneous ejaculation, risperidone

ÖZ

Cinsel yan etkiler antipsikotik kullanımı ile sıkça görülmektedir. Cinsel uyarılma olmadan kendiliğinden ejakülasyonlar daha önce birkaç tipik ve atipik antipsikotik ile bildirilmiştir. Biz risperidon kesilip aripiprazol 30 mg/gün başlandıktan sonra spontan ejakülasyonları olan bir erkek hasta bildiriyoruz. Bu hastadaki spontan ejakülasyonlar aripiprazol dozu 15 mg/güne inildikten 3 gün sonra düzelmiştir. Hasta spontan ejakülasyonların olduğu dönemde cinsel fanteziler ya da cinsel ilgide artış olmadığını ifade etmiştir. Aripiprazolün D2 reseptörleri üzerindeki

parsiyel agonistik etkisi risperidon tarafından baskılanmış olan mezolimbik dopaminerjik yolu güçlendirerek spontan ejakülasyonlara sebep olmuş olabilir. Aripiprazolün serotoninerjik etkileri de dikkate alınmalıdır. Özellikle risperidon gibi dopamin blokajı yapan antipsikotiklerden aripiprazole geçildiğinde bu nadir yan etkinin sorgulanması gerekir; aksi halde bu yan etki hastada utanma ve ilaç uyumsuzluğuna sebep olabilir.

Anahtar kelimeler: Aripiprazol, spontan ejakülasyon, risperidon

INTRODUCTION

Sexual side effects due to antipsychotic drugs are commonly observed (1). Impotence and erectile dysfunction are the most frequent sexual side effects, but spontaneous ejaculations without sexual arousal has also been described previously with zuclopentixol (2), trifluoperazin and thiotixen (3), risperidon (4), and ziprasidon (5). To the best of our knowledge, there is no report associating aripiprazole with spontaneous ejaculations.

CASE

Mr A was 24 years old and was married for 5 years. He was being followed at a psychiatry outpatient clinic for 3 years, with a diagnosis of paranoid schizophrenia. He was using 4 mg/day risperidon for 3 years. His delusions were controlled with this treatment. After his marriage, he complained of erectile dysfunction and loss of sexual interest, and we planned to change his treatment. Risperidon was stopped, and aripiprazole, which has a lower sexual side effect profile, was prescribed at a dose of 30 mg/day. He came to our clinic 2 weeks after the introduction of aripiprazole, complaining of spontaneous ejaculations without sexual arousal 3–4 times a day. He stated that ejaculations had started 1 week after the introduction of aripiprazole. He was consulted to the urology department, and no organic pathology was detected. He continued aripiprazole at the same dose for 1 more week and came to control again. He was still complaining of spontaneous ejaculations; therefore, the aripiprazole dosage was reduced to 15 mg/day. Spontaneous ejaculations stopped 3 days after dose reduction, and he denied loss of sexual interest or erectile dysfunction. In his follow-up, he used 15 mg/day aripiprazole for 6 months, and he did not report recurrence of spontaneous ejaculations. Remission in psychotic symptoms also sustained during follow-up. Written informed consent was taken from the patient in order to publish his data.

DISCUSSION

Antipsychotic drugs generally act to decrease libido by antagonising dopamine receptors and increasing prolactin levels (6,7). In contrast, dopamine agonism caused by certain drugs such as L-dopa, amphetamine, and pramipexole is associated with increased sexual desire and sexual arousal, which are reported by the patients as increased sexual fantasies, erections, and sexual activities (8). Brain dopamine systems



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Received/Geliş Tarihi: 30.07.2014 **Accepted/Kabul Tarihi:** 01.11.2014

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between the hypothalamus and limbic system are thought to be the main sexual excitatory systems (9).

Aripiprazole is a unique antipsychotic drug because it causes a partial agonism at the dopamine D2 receptor (10). Risperidone decreases dopaminergic transmission and is therefore frequently associated with sexual side effects (11). Hence, aripiprazole may act to boost dopaminergic activity at the mesolimbic dopaminergic circuit, which was previously suppressed by risperidone. Aripiprazole also acts on serotonergic receptors and has partial 5-HT_{1A} agonist and 5HT_{2A} antagonistic properties (12). Meston and Frohlich (13) reported that 5-HT_{1A} agonism and 5HT_{2A} antagonism promote sexuality. Lack of hyperprolactinemia in addition to these receptor effects may be the cause of spontaneous ejaculations in our patient, although further research is needed to clearly explain the sexual effects of aripiprazole.

Cheon et al. (14) reported two female patients who reported hypersexuality (demand for daily sexual intercourse, frequent use of online pornography, frequent masturbation, and unprovoked sexual urges toward strangers) after change in treatment regime from risperidone to aripiprazole. Vrignaud et al. (15) reported a male patient who had hypersexuality after aripiprazole treatment. Our patient had spontaneous erections and ejaculations after substituting aripiprazole for risperidone, but he denied increased sexual desire during these ejaculations.

Increased sexual desire and/or spontaneous sexual arousal should be questioned in schizophrenia patients taking aripiprazole, particularly if it is introduced after the cessation of D2 antagonists such as risperidone. If unrecognized, this unusual side effect may lead to embarrassment of the patient and noncompliance with treatment.

Conflict of Interest: No conflict of interest was declared by the authors.

Financial Disclosure: The authors declared that this study has received no financial support.

Çıkar Çatışması: Yazarlar çıkar çatışması bildirmemişlerdir.

Finansal Destek: Yazarlar bu çalışma için finansal destek almadıklarını beyan etmişlerdir.

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