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HIGH DOSAGE OF ARIPIPRAZOLE INDUCED PRIAPISM: *A CASE REPORT*

To the Editor:

Priapism is a persistent erection, usually painful, that is not necessarily associated with stimulation or sexual desire. Priapism might caused by medical treatment provided from a clinical practice. There are some case reports about antipsychotic-related priapism.[1,2] However, there are few reports about aripiprazole-induced priapism. We present a case of a patient who developed priapism during treatment with aripiprazole.

Mr. B, a 24 year-old male, is a case of psychotic disorder. He had idle daily life for four years. Four months ago, he started having auditory hallucination, delusion of being monitored, delusion of persecutory, bizarre delusion, and magical thinking. He was admitted to our acute psychiatry ward due to psychotic deterioration. We initially prescribed aripiprazole 10 mg/day. Nine days later we increased the dosage to 20 mg/day. After 8 days of this dosage, he complained of strange feelings after his evening does of aripiprazole (ie, he thought that somebody teased him). We increased the aripiprazole dosage to 25 mg/day for the irrational thought. But, he felt the condition worsen. After clarification, penile erection was noted. He stated that this would persist all day. Priapism was then diagnosed. He was bothered almost all day, especially when he lay down. We switched his antipsychotic to olanzapine 10 mg/day. The priapism soon disappeared.

In this case, we found priapism was related to the dosage of aripiprazole.

Priapism could occur in any age, but is especially common from 20–50 years of age.[3] Sood and colleagues[1] identified 50 case reports of priapism linked to aripiprazole, clozapine, olanzapine, quetiapine, risperidone, and ziprasidone. The mechanism of priapism associated with antipsychotics is not clear, however, it is thought to be related to α-adrenergic blockage mediated by the α_1 receptors in the corpora cavernosa of the penis.[1,3] Aripiprazole exhibits high affinity for D_2 and D_3 and 5-HT_{1A} and 5-HT_{2A} receptors, and moderate affinity for D_4, 5-HT_{2C}, and 5-HT_7, α_1-adrenergic and H_1 receptors.[4] In this case, priapism was not presetn as an adverse effect when the dosage of aripiprazole was <20 mg/day. Priapism only presented in high dosage of aripiprazole treatment (≥20 mg/day). Dosage related priapism was suspected. There is low risk of priapism in patients treated with any dosage of aripiprazole. However, when the dosage of aripiprazole is increased, priapism should be reminded.

Sincerely,
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