# Sertindole-Induced Hypomania: A Case Report

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**ÖZET:**
Sertindole bağlı hipomani: Bir olgu sunumu

Atipik antipsikotikler bir taraftan bipolar bozukluk tedavisinde yaygın olarak kullanılırlarken, diğer taraftan manik ve hipomanik durumlara yol açabilmektedir. Burada sunduğumuz olguda, şizofrenili erkek bir hastada sertindol tedavisinin başlamasından sonra ortaya çıkan bir hipomanik atak tanımlanmıştır.

**Anahtar sözcükler:** Sertindol, hipomani, olgu

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**ABSTRACT:**
Sertindole-induced hypomania: a case report

Although atypical antipsychotics are now commonly used in the treatment of bipolar disorder, they can also lead to manic and hypomanic states. Here, we report a case of hypomanic episode due to initiation of sertindole treatment in a male patient diagnosed with schizophrenia.

**Key words:** Sertindole, hypomania, case

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## INTRODUCTION

Despite of the fact that atypical antipsychotics are widely used in the treatment of mania, these drugs can cause mania and manic like states (1-3). Sertindole, recently marketed an atypical antipsychotic after the phase IV investigation in Turkey, is a non-sedating atypical antipsychotic agent with high selectivity for dopaminergic neurons in the mesolimbic system and also with affinity for serotonin 5-$HT_{2A}$ and 5-$HT_{2C}$, and alpha1-adrenoreceptors (4).

We report a case of hypomanic episode due to initiation of sertindole treatment in a man diagnosed with schizophrenia.

## CASE REPORT

Mr. A, male, 30-years-old, single, high school graduate, unemployment.

The history of complaints

Mr. A, with a 11 years history of schizophrenia was presented to the Firat University School of Medicine, Department of Psychiatry with the complaints of irritability, avolition, alogia, voices commenting on his behaviors, suicidal ideation, and affective flattening and he was admitted to the inpatient clinic. In fact, he had been followed by our clinic for about two years and had been admitted twice before. He had no history of substance abuse and other Axis I disorders. There was also no history of family psychiatric disorder. He had taken several antipsychotics including typical and atypical ones along his illness period. He was given ziprasidone, olanzapine, and finally risperidone within the last two years. At the time of admission, he was on the treatment of 4 mg risperidone per day. This treatment was given nearly six months ago during the last admission. Despite this treatment, he applied to complaints aforementioned above. He was hospitalized and the risperidone treatment regimen was discontinued. Afterwards, sertindole of 4 mg per day was started and increased to 16 mg per day within nine days. On day 5 of the last dose, he became increasingly irritable and angry

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and was sleeping only about 2 hours a night. Then, in the following days, he presented grandeur delusions, aggressiveness, and euphoria. He was singing songs with other patients. In mental state examination, interest and care to oneself was not enough. Mr. A's speech was detailed and was jumping from subject to another. He had irritability and mood related auditory hallucinations. Also, he exhibited psychomotor acceleration, delusions of grandeur, and euphoria. Thus, the sertindole dose was reduced to 8 mg per day. After this change, hypomanic symptoms improved greatly. However, in the following days, his avolition, alogia, blunted affect and hallucinations became significant in clinical presentation. Therefore, clozapine of 25 mg per day was initiated and was increased to 300 mg per day for maintenance treatment. He was discharged 12 days later,without any hypomanic symptoms.

## DISCUSSION

In the present case, evidence of the sertindole being the cause of a hypomanic episode according to DSM-IV includes: (1) appearance of the symptoms in association with starting sertindole's increasing dosages, (2) disappearance of those with decreasing dosages, (3) no history of any drug being able to manic or hypomanic state. Atypical antipsychotic-induced manic and hypomanic states have been reported (1-3). However, we could not encounter sertindole-induced manic or hypomanic episodes in the literature. Several hypothetic explanations were put forward to explain the mood-elevating effects of atypical antipsychotics. The most important one is the disablement of 5-$HT_2$/$D_2$ occupation balance. When the 5-$HT_{2A}$ receptors have been blocked, frontal dopamine release could increase, which in turn may account for the induction of hypomanic and manic states (5). Meanwhile sertindole has a selectivity for dopamin output compared to other atypical antipsychotics. The effects of acute administration of sertindole dopamine output were examined in the shell part of the nucleus accumbens and the striatum areas by using in vivo differential normal pulse voltammetry in rats (6) and the notion aforementioned was supported.

In conclusion, sertindole may exhibit a hypomania-mania induction effect. Therefore, clinicians should be aware of the situation.

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