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# SERTRALINE INDUCED TREMOR

## SERTRALİNE BAĞLI TREMOR

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**Abstract**

Specific serotonin reuptake inhibitors have been associated with extrapyramidal dysfunction manifesting as parkinsonism, dystonia, tremor, and akathisia. Here, we describe an old female patient with a diagnosis of moderate depressive episode who developed tremor with sertraline in the absence of concurrent prescription of medications, which have potential action on the dopaminergic system and whose symptoms resolved after the drug was discontinued.

**Keywords:** Sertraline, Tremor, Agomelatine, Adverse drug reactions

**Özet**

*Belirli serotonin geri alım inhibitörleri; parkinsonizm, distoni, tremor ve akatizi olarak ortaya çıkan ekstrapiramidal bozukluklarla ilişkilidir. Bu çalışmada, ilaçların eş zamanlı preskripsiyonunun eksikliğinde sertraline bağlı tremor geliştiren, dopaminerjik sistem üzerinde işlem potansiyeli olan ve ilaç kesildikten sonra semptomları ortadan kalkmış orta şiddetli depresyon teşhisi olan yaşlı bir kadın hasta değerlendirilmiştir.*

**Anahtar Kelimeler:** Sertralin, Tremor, Agomelatin, Olumsuz ilaç reaksiyonları

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## 1. Introduction

Selective serotonin reuptake inhibitors (SSRI) are widely used antidepressants due to their high index of therapeutic efficacy and safety. However, there are reports indicating that it can precipitate extrapyramidal dysfunction as an undesirable side effect manifesting as tremor, akathisia, dystonia and parkinsonism (Di Rocco, Brannan, Prikhojan and Yahr, 1998). We report a patient who developed tremor while using sertraline, whose symptom resolved after the drug was stopped.

## 2. Case report

A 68-year-old widowed female presented with low mood, reduced interest, somatic symptoms, disturbed sleep and decreased appetite of one month duration precipitated by death of her husband. On mental status examination depressed affect and depressive cognitions were elicited. A diagnosis of moderate depressive episode according to ICD 10 was made and she was prescribed Tab. Sertraline 50 mg/day and Tab. Clonazepam 0.25 mg/day. Patient came for first follow up after 2 weeks reported improvement. But, she started having tremors of both hands while keeping hands in air or when catching some objects with hand, but not during resting her arms on her knee. There was no history of tremors before starting the current treatment. She was diagnosed with hypertension years back and was on Tab. Amlodipin 5 mg/day. A medical evaluation done and other possible causes of tremor ruled out. Sertraline was stopped and Tab. Agomelatine 25 mg/day started. Tremor resolved over a period of 2 weeks and mental state remained better.

## 3. Discussion

The present case suggests the precipitation of tremors after starting sertraline. The occurrence of tremor when patient was on sertraline and resolution after stopping the drug rules out other alternative explanations. According to Naranjo Algorithm (Naranjo et al., 1981) with a score of 6, the tremors occurring in our case was probably due to sertraline.

Selective serotonin reuptake inhibitors (SSRIs) cause a variety of drug induced movement disorders, among which tremor is probably the most common. The tremors induced by SSRIs were typically postural or action in nature, as in our case (Serrano-Dueñas, 2002). The possible mechanism could be the action of SSRIs on the serotonergic receptors at the inferior olivary nucleus and sigma 2 receptors of the red nucleus. These two structures may stimulate the thalamus and cortical neurons thereby activating spinal cord and the peripheral arch resulting in a state of rhythmical tremogenic over excitement that causes tremor (Serrano-Dueñas, 2002). Agomelatine, an antidepressant with more of melatonergic and less of serotonergic activity (Kasper, and Hamon, 2009), was found as an alternative drug in the present case in controlling depression without precipitating tremor.

Thus, the present case describes tremor, a rare but important side effects associated with the use of SSRIs and suggest that agomelatine could be a safe and effective

alternative drug in patients with depression sensitive to serotonergic EPS.

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