

Levetiracetam induced mania – A case report

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Dear Editor,

Levetiracetam is an anti-epileptic second generation drug with a unique mechanism of action involving the modulation of neuronal vesicle exocytosis¹. Alongside its indication for partial epilepsy, it has been proposed as mood stabilizer in both manic and depressive phases in bipolar disorder. Although its favorable side effects profile, up to 16% behavioral signs like agitation and aggression may occur. Manic symptoms were already reported in two papers, seeming to be a rare yet possible secondary consequence of this agent^{2,3}. We report a case of a levetiracetam-induced manic episode in a 58-year-old male without previous psychiatric history.

A 58-year-old Caucasian male with a medical history of epilepsy since infancy was admitted to Neurology ward for uncontrolled epileptic seizures. He was under phenobarbital 100 mg, valproic acid 1,500 mg and hidantine 300 mg daily treatment. The patient had no prior personal or family history of mental health problems. Valproic acid was stopped and levetiracetam was initiated and augmented till 3,250 mg/d.

Two weeks after discharge, the patient started presenting irritability, restlessness, increased psychomotor activity, decreased need for sleep, socially disinhibited behavior, intrusive contact with strangers and excessive shopping. One month later, he was admitted to our psychiatry emergency. As no relevant alterations were found on complete imagological and analytic workup, a diagnosis of manic episode was established. He was prescribed with quetiapine 250 mg/d and levetiracetam to 2,000 mg/d with frankly remission of the symptoms in 2 weeks.

Manic episodes are usually related with bipolar disorder but can be triggered by other disorders⁴ or substances. Therefore, the temporal sequence of events, the age of patient, the absence of other concomitant medications (corticosteroids, antihistaminic and antidepressants), the negative history of past psychiatric history

or substance use strongly suggests that the manic episode was induced by levetiracetam. Due to its growing use in the clinical field, physicians must be aware of possible mood symptoms and behavioral disturbances such as mania that may occur secondarily.

This study was performed in accordance with the provisions of the Declaration of Helsinki 2008 and was approved by the Ethics Committee of Hospital of Braga. We obtained informed written consent from the patient authorizing publication. His anonymity has been preserved.

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Consent

An informed consent was obtained from the patient.

Disclosure statement

The authors report no conflicts of interest.

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