CASE REPORT

Quetiapine-induced manic episode: a paradox for contemplation

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SUMMARY

A 24-year-old man with bipolar disorder who was started on quetiapine as an adjunct to valproate (mood stabiliser) after a depressive episode switched to a manic episode while on the drug. The manic episode resolved following the withdrawal of quetiapine. This case illustrates the rare possibility of quetiapine emergent manic episode which a clinician needs to be aware of in the context of the management of bipolar disorders.

BACKGROUND

Quetiapine is the only atypical antipsychotic that has been approved for the treatment of bipolar depression. It is also used as maintenance therapy for bipolar disorder. It has also been previously demonstrated that it is a safe medication in bipolar disorder with no risk of a switch to a manic episode in patients with bipolar disorder.¹ Hence, this case report intends to provide clinicians a timely warning regarding the possibility of quetiapine-induced manic episode in the background of widespread acceptability and utility of quetiapine in multiple psychiatric illnesses.

CASE PRESENTATION

A 24-year-old man who is a known case of bipolar disorder presented with an episode of moderate depression characterised by symptoms of persistent and pervasive low mood, unable to enjoy many of his previously pleasurable activities such as watching television, listening to music and playing cricket (anhedonia), expressed ideas of helplessness regarding his present state of affairs at both home and office and hopelessness with regard to his future prospects particularly pertaining to his career and interpersonal relationships. The patient also had difficulty in falling asleep and would wake up several hours earlier than usual (initial and terminal insomnia). The patient previously had a history of two depressive episodes with similar symptomatology and one manic episode characterised by elated mood, increased psychomotor activity, over-familiarity with respect to strangers at both home and office, over-talkativeness even with strangers unlike previously, overspending on objects like garments and shoes unlike previously. He would also appear to be fresh in spite of poor sleep, would engage in prayers excessively unlike his previous self. His self-care and hygiene was also poor during that period. The patient was previously maintaining well on mood stabiliser tablet valproate 1000 mg/day for the previous 6 months. Hence, it was decided to augment valproate with tablet quetiapine started at 50 mg, increased to 200 mg in 10 days considering

its antidepressant property. Within 3 days of increasing quetiapine to 200 mg, the patient was observed by family members to be overcheerful, started to engage in conversation with strangers, expression of increased libido, decreased need for sleep and increased psychomotor activity. The patient was also disruptive with frequent anger outbursts directed against family members. The Young Mania Rating Scale (YMRS) score² was 21 at the time of presentation to psychiatry outpatient department (OPD) with the above symptoms.

INVESTIGATIONS

Brain MRI was performed and found to be normal.

DIFFERENTIAL DIAGNOSIS

The patient was not on any concurrent medication other than valproate and quetiapine. The onset and course point against an independent manic episode. Normal brain MRI points against other organic causes.

TREATMENT

The patient was not on any concurrent medication other than tablets valproate and quetiapine. Brain MRI was performed and found to be within normal limits. On careful review of literature, the possibility of quetiapine-induced manic episode was entertained based on a case report of worsening manic symptoms with a slow escalation in the dosage of quetiapine.³ Hence, quetiapine was tapered off over a period of 5 days. This was followed by almost complete resolution of manic symptoms in the subsequent 10-day period. The YMRS score was 3 after a period of 10 days following complete tapering of tablet quetiapine.

OUTCOME AND FOLLOW-UP

The patient was followed up over the subsequent 2-month period in psychiatric OPD. The resolution of the manic episode was followed by mild depressive symptoms that were managed by optimising the dosage of tablet valproate to 1250 mg/day. The patient was euthymic around 2 weeks after optimising the dosage of tablet valproate and was maintaining well over the subsequent 6-week period following which he was lost to follow-up.

DISCUSSION

To our knowledge this is the first report implicating quetiapine in treatment emergent manic episodes though a previous report has documented worsening of pre-existing manic symptoms on treatment with quetiapine.³ The temporal correlation

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between emergence of manic episode on increase in dosage of quetiapine to 200 mg/day and subsequent resolution of symptoms following withdrawal of the drug points towards quetiapine as the offending agent. The Naranjo adverse drug reaction probability scale indicated a 'probable' relationship between emergence of manic episode and quetiapine therapy in this patient.⁴

The unique receptor profile and mechanism of action of the drug provide pointers towards a possibility of the rare phenomenon of quetiapine-induced manic episode. The absence of dopaminergic receptor blockade (D2) and the high affinity for serotonergic receptors (5HT_{2A}) at lower doses,⁵ may explain the above phenomenon to an extent. It has been hypothesised that quetiapine exerts its antidepressant through its metabolite N-desalkylquetiapine, which leads to norepinephrine reuptake transporter inhibition and partial serotonin 1A agonism.⁶ The same hypothesis may also hold good for the possible propensity of the drug to induce or worsen a manic episode particularly in cases of patients with a pre-existing bipolar disorder.

Hence, this case report intends to alert clinicians regarding the rare possibility of quetiapine-induced manic episode when used in the management of bipolar disorders.

Contributors SG was responsible for the clinical case management, conceptualisation and preparation of manuscript.

Competing interests None.

Patient consent Obtained.

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Learning points

- Possibility of quetiapine precipitating a manic episode in bipolar patients inspite of being the only approved atypical antipsychotic in bipolar depression.
- Careful review of receptor profile of antipsychotics may provide clues regarding the emergence of rare adverse effects.
- Using quetiapine as a sole mood stabiliser in the absence of a classical mood stabiliser like lithium or valproate may be a questionable practice in cases of bipolar disorders.

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