

Case Report

Acyclovir in Bipolar Disorder: A Mismatched Combination?

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ABSTRACT

Acyclovir, a commonly used antiviral drug can rarely result in neuropsychiatric complications especially in elderly. We for the first time report acyclovir associated hypomania in an elderly woman. Our report suggests that acyclovir is a risk factor for mood episode in vulnerable individual and one need to be cautious while using antiviral agents in patients with psychiatric disorders.

Key words: *Acyclovir, antiviral, bipolar disorder, hypomania*

INTRODUCTION

Antiviral drug acyclovir is commonly used for the treatment of varicella zoster infection. Acyclovir and its congeners can rarely result in psychosis, mania and neurotoxicity in elderly, immunocompromised individuals.^[1-4] However, there are no reports of acyclovir-associated hypomania in psychiatric population. We for the first time report acyclovir-associated hypomania in an elderly woman.

CASE REPORT

Mrs A is a 55-yr-old lady with bipolar affective disorder for the last 33 years with hypothyroidism since 2 years. Her last episode was 10 months back, when she was diagnosed as mania with psychotic symptoms and subsequently was on treatment with Tab. Sodium

valproate 1000 mg/day, Tab. Lithium 600 mg/day, Tab. Quetiapine 300 mg/day, Tab. Thyroxine 100 mcg/day with which she was maintaining remission. She presented to us with a 3-day history of irritability, increased talkativeness and decreased need for sleep. Five days before the onset of these symptoms, patient had vesicular lesions over the body which was diagnosed as chicken pox by dermatologist (she did not have past history of chicken pox). She was started on treatment with oral acyclovir 1600 mg/day. The hypomanic symptoms were reported to have started after 24 hrs of starting acyclovir. On mental status examination, she was distractible, had irritable mood, emotional lability, increased psychomotor activity and decreased attention span. She did not have any psychotic symptoms. On young mania rating scale (YMRS) she had a score of 18. On physical examination she had vesicular lesions in different stages of cresting all over the body. Her hemogram, liver and kidney functions were normal. Her thyroid profile showed mild elevation of TSH-9.28 mIU/ml (normal: 0.28-6.82 mIU/ml) with normal T3, T4 levels. Her MRI brain was normal. She was diagnosed as having bipolar affective disorder, current episode hypomania (ICD-10). Acyclovir was stopped. Antipsychotic was changed from Quetiapine to Olanzapine 5 mg/day. Other medications were continued as earlier. She showed improvement in

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symptoms after 1 week (YMRS score 7) and was discharged from hospital.

DISCUSSION

Index patient had an episode of hypomania within a week of developing chicken pox and 24 hours after starting acyclovir.

Three possible scenarios could have resulted hypomanic episode in index patient. Previous reports have documented psychiatric manifestations due to acyclovir and its congeners in elderly individuals with immunocompromised state or physical illness.^[2-5] Although an earlier report reported resolution of symptoms after stopping acyclovir,^[5] we started her on olanzapine in view of her past history of severe manic episodes. On Naranjo adverse drug reaction probability scale^[6] she had a score of 4 indicating a possible association.

We did not find any previous report of varicella zoster infection resulting in mania or hypomania, thus making it unlikely to be associated with the index episode. However, index episode being secondary to stress associated with chicken pox though, less likely, is still possible. In conclusion, our report suggests that acyclovir is a risk factor for mood episode in vulnerable individual and one need to be cautious while using

antiviral agents in patients with psychiatric disorders.

REFERENCES

1. Itoh M, Hayakawa K. A girl with transient psychological disturbance caused by orally administered acyclovir—differentiation between acyclovir neurotoxicity and herpes simplex encephalitis. *No To Hattatsu* 1998;30:328-33.
2. Nakamoto N, Nakayama T, Kudo S, Tanaka M, Fujita Y, Hattori T, et al. A case report of acute encephalitis with neuro-psychiatric side-effects of acyclovir. *No To Hattatsu* 1998;30:334-8.
3. Fukunishi I, Inada T, Horie Y. Manic symptoms caused by acyclovir in a hemodialysis patient. *Nephron* 1994; 67:494.
4. Aslam SP, Carroll KA, Naz B, Alao AO. Valacyclovir-induced psychosis and manic symptoms in an adolescent young woman with genital herpes simplex. *Psychosomatics* 2009;50:293-6.
5. Chen JL, Brocavich JM, Lin AY. Psychiatric disturbances associated with ganciclovir therapy. *Ann Pharmacother* 1992;26:193-5.
6. Naranjo CA, Busto U, Sellers EM, Sandor P, Ruiz I, Roberts EA, et al. A method for estimating the probability of adverse drug reactions. *ClinPharmacolTher* 1981;30:239-45.

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