

TWO MANIAS TRIGGERING WITH ONLY PREDNISOLONE: A CASE WITH IMMUNE THROMBOCYTOPENIA

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INTRODUCTION

During steroid treatment, patients should be considered for psychiatric disorders such as depression, mania, hypomania and psychosis that can develop as well as systemic complications such as infection, peptic ulcer, cushingoid appearance, osteoporosis, hypertension and diabetes. The incidence of diagnosed psychiatric disorders due to steroid therapy has been reported to be 3-6%, but it is thought that there are more undiagnosed patients with mild psychiatric symptoms (Bolanos et al. 2004).

Numerous mania, depression, psychosis, delirium, suicide, depersonalization, cognitive impairments and mild psychiatric symptoms (irritability, insomnia, anxiety, and labile affect) were reported due to steroid treatment. While euphoria and hypomania are frequently observed in short-term steroid use, depressive symptoms are more common in long-term steroid treatments (Lopez-Medrano et al. 2002). Here, we aimed to present a patient with immune thrombocytopenia (IT) who had two attacks of thrombocytopenia, received steroid treatment in both also, and had also manic episodes in both.

CASE REPORT

A 50 years old, married woman was brought to psychiatry outpatient clinic with the complaint of aggression, increased energy, too much speech, decreased need for sleep and hostile attitude towards her family members. The patient was started on oral prednisolone loading treatment for 60 mg per day due to IT approximately twenty days ago. The patient recovered significantly within about two weeks and returned to normal functioning. In the 3rd week of IT treatment, that is, the gradual prednisolone dose reduction continues, while taking 15 mg per day prednisolone, manic symptoms appeared with irritability, increased energy, increased activity in housework, being more talkative, distractibility, a marked decreased need for sleep. In the mental state examination; defensive attitude, irritability, increased self-esteem, pressurized speech, flight of ideas, persecution delusions, psychomotor agitation, insightlessness were observed. The Young Mania Rating Scale score (YMRS) of the patient was 35, the Positive and Negative Syndrome Scale score (PANSS) was 91.

She had her first diagnosis of IT twenty years ago and she had first manic episode after prednisolone loading treatment at the time of first diagnosis of IT, therefore she had been hospitalized for 4-5 days, but she did not use any psychotropic drugs after discharge and did not go to any psychiatry outpatient clinic control. She had no psychotic or mood related symptoms until the second thrombocytopenia attack. In her family history, her brother had bipolar disorder. It was learned that premorbid personality traits were timid, calm and harmonious.

The patient was hospitalized to our psychiatry clinic with the diagnosis of corticosteroid induced bipolar and related disorder with psychotic features according to DSM-5 diagnostic criteria, and her prednisolone 15 mg per day treatment was discontinued. Her general system examination, brain magnetic resonance imaging, biochemical tests and complete blood count were normal.

Due to her agitation and aggression and refusal of oral drug intake during her hospitalization, she was injected with 5 mg ampoule 2x2 of haloperidol and 5 mg ampoule 2x1 of biperiden in the first two days. Valproate 1000 mg per day and quetiapine 300 mg per day were added as a mood stabilizer for the patient on the 3rd day. Haloperidol and biperiden injections were discontinued on the 4th day. Risperidone 8 mg per day and biperiden 4 mg per day were added to the treatment of the patient whose psychotic and manic symptoms did not regress. In the follow-up, the patient's insight improved, her irritability and aggression remained, her sleep improved. On the 10th day of hospitalization, the YMRS score was 12, the PANSS score was 56. The patient was discharged given a control appointment.

DISCUSSION

The most common psychiatric side effects of steroid treatment are agitation, anxiety, hypomania, insomnia, irritability, labile mood and restlessness (Lewis & Smith 1983). However, it can cause a wide range of clinical symptoms, from ambiguous mood changes to psychotic agitations that require urgent intervention (Lewis & Smith 1983). The pathophysiology of psychiatric side effects of steroids is still controversial. However, the psychiatric symptoms are thought to occur due to cholinergic and dopaminergic stimulation. Corticosteroids

disrupt the function of the sodium potassium pump located in the cell membrane and decrease the release of serotonin (Sirois 2003). While euphoria and hypomania are frequently observed in acute steroid use, depressive symptoms are more common in chronic treatments. In our case, both manic periods were started after steroid loading treatments that can be described as acute steroid use. It is stated that psychiatric symptoms due to steroid treatment may begin days or weeks after treatment or after treatment ends (Goodwin & Jamison 2007, Kartalçı & Eser 2004). In our case, manic symptoms started 3 weeks after initiation of loading therapy while under maintenance steroid therapy.

The second conspicuous result in this case is that the patient diagnosed with bipolar disorder had only two manic episodes and her both episodes were triggered with only prednisolone. She never had any other manic or depressive episodes during the 20 years period although she did not receive maintenance pharmacotherapy. In our case, the underlying predisposition to bipolar disorder was triggered only by prednisolone, which supports how strong the psychiatric side effect of prednisolone could be.

Studies have been reported that there are other risk factors that contribute to and facilitate the development of psychiatric symptoms after the use of corticosteroids. Serum albumin, rheumatologic diseases such as SLE, having a psychiatric disorder in the family history, female gender and pre-disease personality traits, dosage spectrum (moderate risk between 40-80 mg) have been reported as other risk factors (Wolkowitz et al. 1990, Bolu et al. 2013, Gagliardi et al. 2010, Boston Collaborative Drug Surveillance Program 1972). Our case is evaluated in terms of specified risk factors; it is compatible with the literature, as taking 60 mg per day prednisolone, developing manic symptoms while under steroid treatment, having a family history of bipolar disorder, female gender, and premorbid personality traits as introverted and shy.

CONCLUSION

The patient group under risk factors for mental disorders should be followed and treated with the Consultation Liaison Psychiatry, because it's not possible to predict the severity of psychiatric symptoms that can be triggered by prednisolone with the available data. The fact was that our patient underwent a manic attack for the second time while under steroid treatment, and that her second attack was accompanied by psychotic symptoms and was more resistant to treatment than the previous attack.

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