A Case Report of Steroid Induced Psychosis in a Female with Systemic Lupus Erythematosus

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Abstract

Systemic lupus erythematosus (SLE) may present with different neuropsychiatric manifestations. However psychosis per se is not reported to have a high incidence. It can be mainly due to the drugs (Steroids) used in the treatment of Systemic lupus erythematosus and rarely secondary to the brain involvement in SLE. High doses of steroids used in SLE may result in anxiety symptoms, depressive or manic symptoms. We are discussing about an adult female who presented to the psychiatry outpatient department with altered behaviour, referential ideas, emotional instability, aggressive behaviour and irrelevant episodes of laughter. On further detailed work up she was found to have SLE for which steroids had been prescribed. Her psychotic symptoms showed significant improvement after her steroid dose was reduced.

Keywords: Systemic lupus erythematosus; steroids; psychotic symptoms

Introduction

Systemic Lupus Erythematosus (SLE) is an autoimmune disease in which organs and cells undergo damage, mediated by tissue binding auto-antibodies and immune complexes. 90% of patients are women of child bearing age. Female to male ratio is 9:1. Prevalence is around 15-50 per 100,000 populations. Neuropsychiatric manifestations are reported in up to 60% of patients with SLE [1].

Steroids may have diverse and sometimes severe effects in short and long term use. The psychiatric effects of corticosteroids—cognitive, mood, anxiety and psychotic symptoms were first described as steroid psychosis. Steroid induced symptoms emerge from 3–4 days to a median of 11 days after a patient starts corticosteroid therapy. After steroids are discontinued depressive symptoms may persist for 3 weeks, mania for 4 weeks and delirium a few days [2]. Psychiatric symptoms in SLE can be functionally independent psychiatric disorders. It can be due to steroids used in SLE or secondary to SLE because of the brain involvement [3].

The differential diagnosis with lupus psychosis is difficult. In case of doubt, some authors advocate increasing the dose of steroids and awaiting a clinical response over the next days. Others advocate rapid tapering and stopping steroids in order to eliminate a drug induced adverse event [4]. A meta-analysis reports severe psychotic reactions in 5.7% of patients taking steroids and mild to moderate reaction in 28% of patients [5].

Here we are reporting a case of SLE who was on steroids reporting to us with symptoms suggestive of mania.

Case Presentation

A 24 year old female, Hindu by religion, unmarried, working, from urban background, hailing from a middle socio-economic status family presented with a history of low grade intermittent fever with multiple joint pains since the past one month for which the patient took symptomatic treatment with multiple joint pains since the past one month for which the patient took symptomatic treatment before consulting a specialist. On detailed evaluation with the specialist she was found to have polymorphous rashes on the flexor aspect of her upper limbs and palms. On further investigations her Anti-Nuclear Antibody was positive, Anti-Sm Antibody was positive, and Anti nRNP/Sm Antibody was positive following which SLE was diagnosed. The patient was then started on 40 mg Prednisolone and 200 mg of Hydroxychloroquine. She was maintaining well for the first 8 days of treatment following which she presented to the Psychiatry department with altered behaviour of 2 days duration characterised by aggressive behaviour, inattentiveness, emotional instability, suspiciousness, referential ideas, disinhibited behaviour and decreased need for sleep.
Mental status examination patient was found to be overfamiliar with inappropriate laughter, increased psychomotor activity, increased volume and tone of speech which was irrelevant with thought content of delusion of persecution, delusion of reference and delusion of grandiosity and mood that was elevated, irritable with mood lability. On day one of examination BPRS was 66 and YMRS was 32 and the provisional diagnosis of Steroid induced mania was made. Tablet Risperidone 6mg in two divided doses and Tablet Quetiapine 200 mg in two divided doses was started with which patient showed little improvement in the first 2 days. On day 3 of admission Prednisolone dose was reduced to 20mg/day. By the end of day 5 patient’s psychotic symptoms showed significant improvement and biological functions became normal. On day 6 of examination BPRS was 35 and YMRS was 12. Patient maintained improvement during subsequent follow-ups.

Discussion

In a study done amongst 130 patients mania was the most prevalent (35%), followed by depression (28%), mixed mood episodes (12%), delirium (13%), and non-specific psychosis (11%) [6-8]. Steroid induced mania often starts from a few days to two weeks after administration of steroids. Female sex, past psychiatric history, prednisolone dose of more than 40mg/day and long term administration are considered to be the major risk factors for steroid induced psychosis. In our patient, two of these risk factors were present. Although the difference between Neuropsychiatric SLE and steroid-induced psychosis is difficult, clinically adequate antipsychotic treatment and reducing the dose of steroids showed significant improvement in the psychotic symptoms in this case.

References