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Background

Drugs known as Selective Serotonin Reuptake Inhibitors (SSRI) are amongst the most commonly described psychotropic drugs. These are used in the treatment of a multitude of Psychiatric and non-psychiatric conditions and are also being explored as potential immunosuppressants/immunomodulators [1]. SSRIs act by inhibiting the pre-synaptic reuptake of serotonin at neural synapse. Although instances of rash with use of fluoxetine has been described earlier; the association of rash with fluoxetine was blurred because of concomitant use of other drugs/food or the rash was part of a systemic 'serum sickness' like condition [2, 3]. We describe a case of rash after use of fluoxetine for treatment of depressive episode.

Case

A 40 year old female presented with complaints of persistent and pervasive sadness of mood, reduced interest in previously enjoyable activities, lethargy, impaired sleep and appetite and considerable socio-occupational dysfunction in absence of any other medical/neurological illness or substance use which could result in such a presentation. She denied any history of allergy or sensitivity to any drugs in the past. After being diagnosed with moderate depressive episode, she was prescribed oral amitriptyline at the dose of 50 milligrams/day with plan to gradually increase the dose to antidepressant dose range (150mg-300mg per day). She developed adverse effect in the form of dryness of mouth. The antidepressant was changed from amitriptyline to fluoxetine, which was started at a dose of 20 milligrams/day. Five days after starting fluoxetine, patient started having itching in the region of upper and lower limb, which later involved the face. Within next 2-3 days, maculopapular erythematous rash appeared in bilateral arms and legs and progressed to involve the face and trunk and sparing the

Case Report

Fluoxetine Induced Erythematous Maculopapular Rash: A Case Report

palms and soles. There was no associated scaling. It was not associated with fever and joint pain. An adverse drug reaction caused by fluoxetine was suspected and fluoxetine was stopped and oral cetirizine 10 milligrams/day was prescribed as anti-allergic for rashes. Oral Paroxetine (controlled release) 12.5 milligrams/day was started for the management of depressive episode. The erythematous rash resolved over next one week, leaving hyper-pigmentation which gradually cleared over next 3-4 months. Depressive episode remitted on Paroxetine (controlled release) 25 milligrams/day.

Discussion

Selective Serotonin Reuptake Inhibitors act through serotonin receptors. One such receptor-5HT₇ has been found to be associated with Serotonin mediated acute and chronic itch [4]. Rashes induced by SSRIs have been seldom reported in literature. A case of development of a morbiliform itchy rash on treatment with paroxetine has been described [5]. Although development of rash with fluoxetine treatment has been described earlier, the association between fluoxetine and rash has been blurred because of concomitant use of sertraline and tryptophan (precursor for serotonin) rich food item [2]. In another case of rash after initiation of fluoxetine, it was part of a severe 'serum sickness' like condition and rash was associated with fever and joint pain [3].

Although a skin test with fluoxetine could have reasonably proved the causal association between rash and fluoxetine, the same could not be done because of patient's preferences. However, as our patient was not taking any other drug/new food item/serotonin rich food, and appearance and resolution of rash was temporally related to introduction and withdrawal of fluoxetine; it is likely to be causally related to rash. As the patient did not experience rash with other antidepressants (paroxetine and amitriptyline), the rash seems to be specific to fluoxetine and not as a class effect of SSRIs/antidepressants. This has implications for management of such cases as change of antidepressant may be a safe option in management of depressive episode in patients experiencing rash with fluoxetine.



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