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Case Report: Risperidone-Induced Erythema Multiforme Minor: A Case Report

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ABSTRACT

Erythema Multiforme (EM) is a hypersensitivity reaction that can be triggered by an infection or particular medications. Erythema multiforme minor (EM minor) represents localized skin lesions with minimal or no mucosal involvement. Only a few case of EM associated with risperidone are found in the scientific literature. In this case report, the administration of the risperidone resulted in the rapid appearance of skin lesions. Erythematous lesions were recovered upon discontinuation of the drug and no new skin lesion was observed. A 52-year-old male patient was admitted to the psychiatry hospital because of developing schizophrenic symptoms. At the time of admission, risperidone was added to her previous drug regimen. Two weeks later, the patient returned with a complaint of progressively increasing rashes over his body. The patient was diagnosed with EM minor. The prescribed risperidone was discontinued due to its side-effect profile and the patient's drug regimen was changed entirely to the olanzapine, haloperidol, and topical clobetasol. At one month follow up visit, his skin lesions were satisfactorily controlled.

1. Introduction

Erythema Multiforme (EM) is a self-limited eruption considered to be a hypersensitivity reaction associated with particular drugs and other different triggers. Most recent reports have revealed that EM might be caused by the cytotoxic immunological reaction against the keratinocytes. EM is divided into major and minor forms. Erythema Multiforme (EM) minor is usually a mild condition that represents localized skin lesions with minimal or no mucosal involvement.

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Erythema multiforme major is the life-threatening form of EM with severe mucosal involvement and may require more aggressive treatment [1]. Studies on the immunological effect of antipsychotic drugs indicated that antipsychotics-induced EM can occur by both typical and atypical antipsychotics. The most common cutaneous adverse effects of antipsychotics are as following: exanthematous eruptions, skin pigmentation disorders, photosensitivity, and pruritus [2]. EM has been observed in about 5% of patients who were prescribed antipsychotics such as risperidone, quetiapine, and ziprasidone [3].

Risperidone, a serotonin-dopamine antagonist, is an atypical antipsychotic and one of the most widely-prescribed antipsychotic medications [4]. Risperidone is known to cause different side effects. Cutaneous reactions have been reported as one of the rare adverse effects of risperidone, which varies from generalized cutaneous rashes and urticaria to even more severe forms such as exanthematous lesions and Stevens-Johnsons syndrome [5, 6].

2. Case Report

The present case report describes a 52-year-old married man who was admitted to the psychiatric hospital. The patient has developed some symptoms of schizophrenia, for example, he was more talkative than usual or pressure to keep talking, had increased libido, profligacy, disorganized speech, and self-laughing over the last year. The patient had been receiving quetiapine tablet 100 mg HS along with biperiden tablet 4 mg/day in divided doses and sodium valproate 200 mg BID to control behavioral exacerbations.

During the admission, the patient received 5 sessions of Electroconvulsive Therapy (ECT). At the time of discharge, oral risperidone 4 mg/d divided dose was added to his previous drug regimen.

Two weeks later, the patient was referred to the hospital with progressively increasing rashes over his body and was admitted to the psychiatric ward once more. On the physical examination, two plaque-like lesions on his left arm (10×12 cm) and left buttock (7×9 cm) were observed (Figure 1). There was no involvement of the mucous membranes.

A consultation with a dermatologist was arranged due to the cutaneous adverse effects of antipsychotics. The patient was diagnosed with EM minor. Immediately before discharge, the patient's prescribed risperidone was discontinued as per the dermatologist's opinion, and the following medications were prescribed: olanzapine tablet 10 mg/d in divided doses along with haloperidol tablet 5 mg HS and topical clobetasol.

At his one-month follow-up visit, skin lesions were eventually controlled.

3. Discussion

Adverse cutaneous reactions associated with antipsychotics are well known. Although EM is an infrequent adverse effect of antipsychotic medications, studies have shown that risperidone-induced EM minor can occur in patients undergoing treatment with this drug [7, 8]. Thus, when antipsychotics-induced EM occurs, withdrawal of the drug might help the patient. However, a thorough assessment of the necessity of medication withdrawal must be undertaken.

4. Conclusion

Despite the possibility of the appearance of skin rashes following both sodium valproate and quetiapine therapy, EM did not appear in our case until the initiation of risperidone administration. Additionally, no new skin lesions were observed upon the discontinuation of the

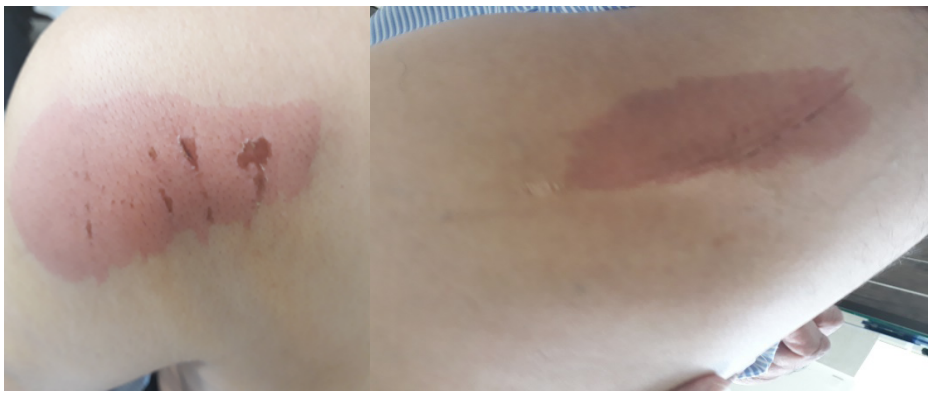

Figure 1. Erythematous lesions were present on the left arm and left buttock

risperidone. Therefore, we propose that EM minor was caused by the risperidone alone.

Ethical Considerations

Compliance with ethical guidelines

Ethical approval was obtained from the Department of Forensic Medicine, School of Medicine, Shahid Sadoughi University of Medical Sciences, Iran.

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Author's contributions

Data interpretation, data analysis: Reza Bidaki, Javad Zare Kamali, Maryam Naseri Bafrouie, Hossein Azadi, Nilofar Tabaei Zadeh; Writing the manuscript: Fatemeh Saghafi, Maryam Naseri Bafrouie; Review, editing, approve the final version of the manuscript: All authors.

Conflict of interest

The authors declared no conflicts of interest.

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