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A CASE REPORT ON OXCARBAZEPINE INDUCED MACULOPAPULAR EXANTHEM: ADVERSE DRUG REACTION OF NEWER GENERATION ANTIEPILEPTIC AGENT

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ABSTRACT

Unlike carbamazepine, newer anti-epileptic drug like oxcarbazepine, reports fewer side effects. In this report we describe a case of oxcarbazepine induced maculopapular rashes. An 18-year-old female patient received oxcarbazepine 150mg twice daily for anxiety. She had developed the rashes after 10 days of taking the medicine. Extensive cutaneous rash with intense itching developed which subsided on discontinuation of oxcarbazepine. This case highlights the fact that there is a potential possibility of adverse drug reaction due to oxcarbazepine.

KEYWORDS: Oxcarbazepine, Erythema, Maculopapular eruption.

INTRODUCTION

Adverse drug responses (ADRs) are unwanted and harmful effects of medications that happen at dosages typically used for therapy.[1] These reactions might be moderate, annoying, serious, or even fatal. They may happen at any point while receiving treatment and may affect one system or several. Rashes, nausea, vomiting, diarrhea, dizziness, and headaches are a few typical ADR instances.

Oxcarbazepine is an antiepileptic medication (AED) that is frequently used to treat seizures, neuropathic pain, and anxiety. Oxcarbazepine-related ADRs can range in severity from moderate to severe and can happen a few days to several weeks after therapy begins.[2] The rash may appear as a fixed drug eruption, an urticarial rash, or even a maculopapular rash. In addition, eosinophilia, and systemic involvement in the form of dermatitis have been reported as side effects.[3] Numerous investigations have suggested that T-cell-mediated allergy reactions may be related to the complex pathophysiology of AED-induced cutaneous ADRs.[4] But further research will be required to completely understand genetic susceptibility and the exact etiology. Recent research has shown that the HLA-B*1502 allele is substantially related to a dramatically elevated risk of Oxcarbazepine -induced Stevens-Johnson syndrome (SJS) and toxic epidermal necrolysis (TEN), but not maculopapular eruption.[5] Oxcarbazepine has been shown with an incidence of adverse reactions that ranged from 46 to 68%.[6,7] It is important to stop taking oxcarbazepine and seek assistance as soon as you can if there are signs that a drug-induced rash may have occurred.[8]

To ensure effective management and to reduce the risk of additional injury, it is crucial to identify and inform a healthcare provider of any suspicious adverse reactions.

CASE PRESENTATION

A 18-year-old female patient presented to the Dermatology department with complaints of pruritic erythematous macules and papules over the trunk, B/L forearm and thighs for one day and palmar erythema was present. Mucosa was within the normal limit and there was no history of fever and cough.

The patient's history included mood swings, increased speaking, anger and seriousness, and inadequate sleep. She was treated with Tab. Oxetol (Oxcarbazepine) 150mg twice daily and Tab. Prodep (Fluoxetine) 20mg at

bed time. She had developed the rashes after 10 days of taking the medicine. Blood test was done and the parameters were found to be normal. This demonstrates that it is not DRESS.

After the visit, the dermatologist advised discontinuing Tab. Oxetol (Oxcarbazepine) use and advised Tab. Omnacortil (Prednisolone) 20mg once daily for 3 days and tapered to 10mg once daily for 4 days for treating inflammation, T. Dazit (Desloratidine) 5mg once daily and Tab. Levorid (Levocetirizine) 5 mg at bed time for treating itching and Derma dew caloe lotion for local application twice daily for provide a soothing effect. The treatment was given for 1 week. Also, the dermatologist advised to visit the psychiatrist and after the consultation, the psychiatrist changed Tab. Oxetol (Oxcarbazepine) to Tab. Zosert (Sertaline), 25mg at bed time.

Patient was reviewed after 1 week and the extensive cutaneous rash with intense itching developed which subsided on discontinuation of oxcarbazepine.

DISCUSSION

Oxcarbazepine, a more recent anti-epileptic medication (AED), is a 10-keto analogue of carbamazepine. Oxcarbazepine is clinically as effective as carbamazepine, but it causes fewer adverse drug reactions (ADRs), apparently since they use distinct metabolic pathways.[9] In comparative monotherapy studies, the most prevalent reason for drug discontinuation was skin rash, which can occur in up to 10% of patients.[10] There have been studies in the past linking HLAB*1502 to the hereditary susceptibility of the skin reactions triggered by oxcarbazepine. AED induced cutaneous adverse drug reaction ranges from mild maculopapular eruption (MPE) and hypersensitivity syndrome, to the more severe Stevens-Johnson syndrome (SJS) and toxic epidermal necrolysis (TEN).[11,12]

CONCLUSION

We therefore concluded that this was a case of oxcarbazepine-induced maculopapular rashes. With this case report we aim to create awareness about rare but potential drug reactions like maculopapular rashes that can occur with oxcarbazepine and so the use of this drug should be carefully monitored.

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INFORMED CONSENT

Before taking this case the patient and their families were informed and informed consent was acquired.

CONFLICTS OF INTEREST

The authors have no conflicts of interest to declare.

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