

Case Report

NIMESULIDE INDUCED STEVENS JOHNSON SYNDROME: A CASE REPORT

***Swapnil Jaykare, V Motghare, J Patil and H Pise**

*Department of Pharmacology, S.R.T.R. Government Medical College & Hospital,
Ambajogai, District Beed, Maharashtra-431517 India*

**Author for Correspondence*

ABSTRACT

Adverse drug reactions to prescribed medicines are an inevitable part of drug therapy. Stevens Johnson syndrome is one such ADR where etiology is linked to the use of drugs rather than other etiologic factors such as infections. Here we report a case of Stevens Johnson syndrome in 8 years old male child following ingestion tablet Nimesulide. Thus far very few cases of Stevens Johnson syndrome have been reported to occur due to ingestion of Nimesulide. The use of Nimesulide in paediatric patients less than 12 years of age has been banned in India. Nimesulide has been banned in many countries, however, in India, due to paucity of data, the drug is rampantly used. Therefore, Government of India should create awareness among practitioners to report all the ADRs to the Adverse Drug Reactions Reporting Centres.

Key Words: *Nimesulide, Stevens Johnson Syndrome, Adverse Drug Reactions*

INTRODUCTION

Adverse drug reactions (ADRs) to medications prescribed forms major obstacles in continuation of treatment in many cases. The severity of these ADRs ranges from mild to life-threatening. Stevens Johnson syndrome is one such ADR where etiology is linked to the use of drugs rather than other etiologic factors. Commonly attributed drugs are sulphonamide followed by non-steroidal anti-inflammatory drugs, anti-convulsant drugs and anti-gout drugs (Fagot, 2001). In Stevens Johnson syndrome, there is characteristic blistering, vesicular rash involving up to 10 % of body surface area with erosion of mucous membrane predominantly the oral mucosa, lips and conjunctivae (Sanmarkan, 2011). Thus far to the best of our medical literature search very few cases of Stevens Johnson syndrome have been reported to occur due to ingestion of Nimesulide.

CASES

An 8 years old child presented to our hospital emergency department with complains of rash all over body since 5 days. Child was apparently alright 5 days back when he had history of drug ingestion for fever. After consumption of medicine there was appearance of rash. Rashes initially appeared over face which spread rapidly to the neck, chest, back and the abdomen, upper and lower extremities within 24 hours.

On examination child was ill looking, having tachycardia and tachypnea with pulse rate of 120/min and respiratory rate of 32/min. Rash was typically vesicular in nature with generalised spreading all over body. There was involvement of mucosal areas as well in the form of vesicular lesions over tongue, buccal mucosa and eyes. Few atypical lesions were present over both upper and lower extremities and genitalia. Systemic examination, otherwise, did not reveal any other significant findings.

On detailed inquiry, parents gave the history of ingestion of tablet Nimesulide prescribed by General Practitioner for fever following which the child developed high grade fever and rash all over body.

Considering the history, clinical examination and laboratory findings, patient was diagnosed as a case of Nimesulide induced Steven Johnson syndrome and managed accordingly. The patient was managed aggressively with parenteral antibiotics, Human plasma immunoglobulin, anti-histaminics, local treatment of lesions and nutritional supplements. After a period of two weeks, clinical improvement was noted in

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the form of healing of mucosal lesions and fading of rash. When Naranjo's scale was applied to carry out causality assessment, score revealed the association as "Probable".



Figure 1: Oral Mucosal Lesions.



Figure 2: Cutaneous Lesions with Involvement of Eyes

DISCUSSION

Stevens Johnson Syndrome (SJS) and Toxic Epidermal Necrolysis (TEN) are severe cutaneous disorders characterized by extensive blister formation over skin and mucous membrane. There is development of acute rash with mucocutaneous involvement which is typically associated with vesicles and blisters. In severe cases, there is extensive necrosis of the epidermis and other epithelia over skin and mucous membrane. When extent of lesions is up to 10% of total skin surface then it is defined as Stevens Johnson syndrome, when it is more than 30% then it is termed as toxic epidermal necrolysis (Tyagi, 2010). Stevens-Johnson syndrome (SJS) was first described in 1922, as an acute mucocutaneous syndrome which is an immune-complex-mediated hypersensitivity. Stevens-Johnson syndrome is a disease listed under the category of erythema multiforme. The milder form of the disease is termed as Erythema multiforme minor; whereas more severe form is termed as erythema multiforme major. Stevens-Johnson syndrome is classified as a major variant of erythema multiforme. It is defined as an acute, self-limiting eruption of the skin and mucous membranes, characterized by a target lesion and diagnostic histological changes (Stitt, 1988). Characteristic clinical presentation includes rash, blisters, or red splotches on skin, persistent fever, blisters in mouth, eyes, ears, nose, genital area, swelling of eyelids, red eyes and conjunctivitis. Target lesions are not always seen in Stevens-Johnson syndrome. Many etiologic factors have been identified in the pathogenesis of Stevens-Johnson syndrome. It is usually categorized as iatrogenic, infectious, or idiopathic. In most of the cases, etiology is linked to the use of drugs rather than other etiologic factors. Almost any medication including over-the-counter drugs, such as Ibuprofen, can cause SJS. Most commonly implicated drugs are anti-convulsant, antibiotics such as sulphonamide, penicillin and cephalosporin and anti-inflammatory medications. So far Sulphonamide and Allopurinol have been reported as the most common cause of Stevens-Johnson syndrome (Harr, 2010). Thus far to the best of our medical literature search very few cases of Stevens Johnson syndrome have been reported to occur due to ingestion of Nimesulide.

CONCLUSION

Nimesulide is readily available as an over the counter drug for various indications such as fever, Myalgia and Arthralgias. The use of Nimesulide in paediatric patients less than 12 years of age has been banned in India in 2011 (CDSCO, 2011). Hence treating physicians should be careful while prescribing Nimesulide because of its potential to cause drug reactions. Nimesulide has been banned in many countries such as United States, Canada, Britain, Australia, Finland, Spain and Turkey. However, in India, due to paucity of

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data, the drug is rampantly used. Therefore, Government of India should create awareness among practitioners to report all the ADRs to the Adverse Drug Reactions Reporting Centres, with special emphasis on the drugs banned outside India.

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