Advances in Medical and Dental Research

Case Report

Drug-Induced Stevens-Johnson Syndrome in a 21 Year Male Patient-A Case Report

Farhan Ahmad Khan[1], Kirti Vishwakarma[2], Imtiyaz Ahmad Shah[3*]

[1]Professor, [2]Assistant Professor, [3*]PG student, Department of Pharmacology, Teerthanker Mahaveer Medical College and Research Centre, Moradabad, UP, India.

DOI:
10.21276/amdr.2015.1.1.6

Article History
Received: 13 Oct 2015
Revised: 20 Oct 2015
Accepted: 28 Oct 2015

***Correspondence to:**
Imtiyaz Ahmad Shah, PG student, Department of Pharmacology, TMMC & RC, Moradabad, UP, India
isim3330@gmail.com

ABSTRACT

Adverse drug reactions (ADRs) are one of the leading causes of death among hospitalized patients and occur in 0.3 to 7 per cent of all hospital admissions. These may vary from mild rashes to severe reactions such as Stevens-Johnson syndrome (SJS). SJS is a life-threatening severe cutaneous adverse reaction. We report here a case of phenytoin induced SJS in a 21 year old male reported to a dermatology OPD of Teerthanker hospital Moradabad. The patient responded to the treatment and was prescribed systemic steroids, Inj. Prednisolone 10 mg qid for 7 days, which was gradually tapered to 10 mg tid for 7 days, 10 mg bid for 5 days, then Tab Prednisolone 10 mg once daily for 5days respectively, Benzydyamine hydrochloride 0.15% oral rinse for oral ulcers.

KEYWORDS: Drug induced Stevens - Johnson syndrome, Adverse Drug reaction, Ciprofloxacin, Diclofenac.

INTRODUCTION

Antimicrobials (37.27%) have been found the most common cause of drug induced SJS, followed by Anti-epileptic drugs (AEDs) (35.73%) and NSAIDs (15.93%).[1] Approximately 0.3 to 7 % of the deaths amongst hospitalized patients have been reported to be caused by adverse drug reactions (ADR). The spectrum of drug reactions may range from mild to severe such as Johnson syndrome (SJS) which is a rare, but with severe cutaneous, cell-mediated hypersensitivity reaction that is usually induced by medication or a virus.

CLINICAL PRESENTATION

A 21 year old male reported to a dermatology OPD of Teerthanker Mahaveer hospital, Moradabad with a chief complaint of fever and extensive rashes on the skin of the face and neck, erythema of conjunctiva, ulcerations oral cavity and difficulty in routine oral habits since a day. It was also associated with pain in left lower limb which was red, sudden in onset, burning type, continuous, localized, and severe in intensity, aggravated on touching.

The past dental history of the patient revealed that he had dental pain due to carious tooth in lower left posterior teeth region for which he had been prescribed Tab Ciplox TZ, BD & Tab Voveron 50 mg TDS for 5 days by a local dentist which he consumed for 3 days and he developed this type of reaction.

The patient was conscious, well-oriented on examination, had hyperpyrexia, generalized maculopapular rashes with crusted eruptions on the neck, face, external ear. The trunk and extremities were having well developed variably sized target like lesions .Left lower limb shows signs of cellulitis also.

Intraoral examination revealed ulcerations of the vermilion surface of lips, labile mucosae, tongue and palate. The ulcers were hemorrhagic and tender on palpation. Hemorrhagic crusted erosions were also seen on both the upper and lower lips. Bilateral submandibular lymph nodes were palpable, tender, mobile, firm in consistency. The oral ulcerations were developed one day prior to development of the skin lesions. But he considered them as a routine complication of therapy and started with application of glycerin. Ophthalmic examination showed acute conjunctivitis and subconjunctival hemorrhages associated with watering of eyes & pus discharge.

Based on this, our clinical diagnosis was Stevens Johnson Syndrome as the lesion noticed in eyes, oral and other body parts. Differential diagnosis thought were pemphigus vulgaris & stomatitis medicamentosa. We subjected the patient to hematologic investigation only as the lesion being acute; the patient was under severe discomfort. His complete blood picture revealed hemoglobin 11g/dl, raised ESR - 50 mm/1st hour & total leucocyte count was 12000 cells/mm3, and platelet count was 208 X 109 /L.

We treated him under an expert guidance of dermatologist with systemic steroids, Inj. Prednisolone 10 mg qid for 7 days, which was gradually tapered to 10 mg tid for 7 days, 10 mg bid for 5 days, then Tab Prednisolone 10 mg once daily for 5days respectively, Benzydyamine hydrochloride 0.15% oral rinse for oral

ulcers. Gentian violet application for lip lesions was advocated & Ofloxacin eye drops 0.3% for eye lesion. Liquid & soft diet was advised. All the lesions healed within 1 & ½ month.

DISCUSSION

Now considered as a clinically distinct disorder, earlier SJS was considered to be part of a spectrum of erythema multiforme (EM) and is part of the SJS-toxic epidermal necrolysis (SJS-TEN) spectrum, characterized by heterogeneous cutaneous bullous eruptions which can result in sloughing of the epidermis. SJS and TEN involve <10% and >30% of the body surface area respectively.

The third condition named as SJS-TEN overlap falls in between SJS and TEN. Patient may initially present with SJS, which subsequently evolves into TEN or SJS-TEN overlap.[2]

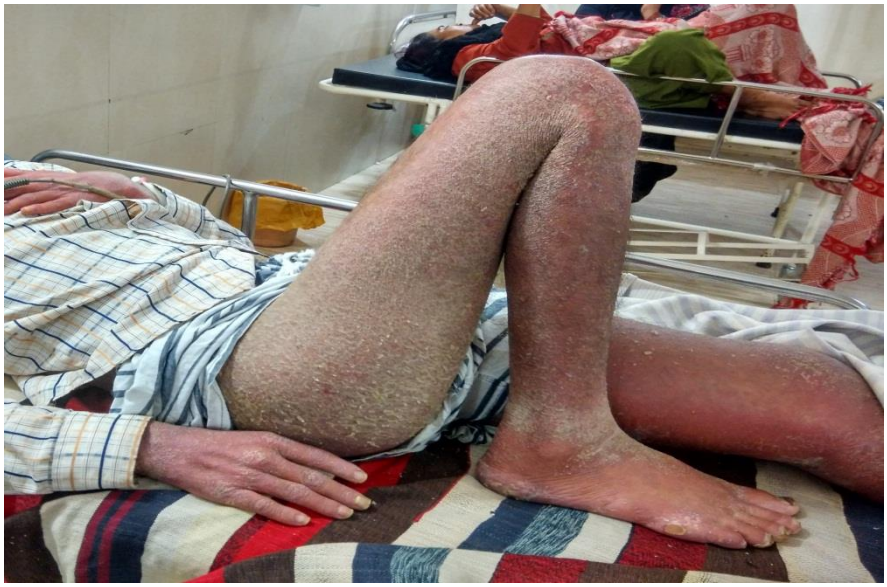

Fig 1: Drug-Induced Stevens-Johnson Syndrome

In the initial stages of the disease process, the epidermis becomes infiltrated with CD8 T-lymphocytes and macrophages, while the dermis shows CD4 predominance cells. It is postulated that the lymphocytes release cytokines, which mediate the inflammatory reaction and apoptosis of epithelial cells.[3] Prodromal features includes fever, cough, sore throat, headache, myalgia, and burning sensation. As described by Sanmarkan[3] et al., skin lesions preceded mucosal lesions in 50% of patients.

REFERENCES

1. Patel TK, Barvaliya MJ, Sharma D, Tripathi C. A systematic review of the drug induced Stevens-Johnson syndrome and toxic epidermal necrolysis in Indian population. Indian J Dermatol Venereol Leprol 2013; 79: 389-90.

2. Pirmohamed M, Friedman PS, Molokhia M, Loke YK,Smith C, Phillips E, La Grenade L et al.: Phenotype standardization for immune-mediated drug-induced skin injury. Clin Pharmacol Ther 2011; 89: 896–901.

3. Sanmarkan AD, Sori T, Thappa DM, Jaisankar TJ. Retrospective analysis of Stevens‐Johnson syndrome and toxic epidermal necrolysis over a period of 10 years. Indian J Dermatol 2011; 56: 25‐9.

How to cite the article: Farhan Ahmad Khan, Kirti Vishwakarma, Imtiyaz Ahmad Shah. Drug-Induced Stevens-Johnson Syndrome in a 21 Year Male Patient-A Case Report. Adv Med Dent Res 2015;Jul-Dec;1(1);31-32.