

A Case Report on Drug(s) induced Stevens Johnson Syndrome

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Case Report

Received: 10/07/2021

Accepted: 24/08/2021

Published: 31/08/2021

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Keywords: Therapeutic, ADR, SJS, TEN

ABSTRACT

The contemporary era has witnessed prodigious makeshift in the field of medical sciences, especially in therapeutic field and unquestionably, being the cornerstone in ameliorating various metabolic disorders as well as acute and chronic infections. Many pharmaceutical organizations have established Research and Development wings (R and D) with particular emphasis in launching new drugs to overcome the side effects of their previous parent/original congeners. This purposeful endeavor generated them expedient results. Albeit to these efforts, few unusual ADRs like Steven Johnson Syndrome (SJS)/Toxic Epidermal Necrolysis (TEN) in sparse have been reported elsewhere.

INTRODUCTION

Compelling evidences from multiple retrospective observational investigations have demonstrated that anti-epileptics, allopurinol and certain antibiotics are considered to be high risk groups to induce SJS/TEN whereas drugs like oxicams, selective serotonin reuptake inhibitors (SSRI's), COX2 inhibitors are considered to be of less chance.

SJS/TEN preponderantly immune mediated reactions attributed to various therapeutic agents. Cardinal signs include muco-cutaneous sensitivity, haemorrhagic erosions, and abrasion of mucous membrane, erythematous macules, blisters and unveiled skin reflecting the severe arduous disunion of the epidermis from the dermis [1]. It is perpended to be potentially fatal, requires imminent medical attention and hospitalization is inevitable.

CASE REPORT

A 38 year old female patient was admitted to the female derma ward on 04-01-2020 at Gulbarga Institute of Medical Sciences (GIMS), Kalaburagi. She was a known case of Type II Diabetes Mellitus since one year. At the time of admission she was presented with complaint of skin lesions accompanied by burning sensation and watery discharge all over the body for last couple of days [2]. As a part of routine ward rounds, we have collected the medical and medication history interview of the patient and penned down following information. Prior to admission to the GIMS, eight days back, she had the complaints of fever & chills, which made her to visit local general physician, for which he prescribed paracetamol 325 mg and amoxicillin 500 mg. After having the following

medication she developed the above mentioned complaints for which she was prescribed with the following medications for eleven days i.e. from 04-01-2020 to 14-01-2020.



Figure 1. Issued the Drug alert card as presented.

- Inj. Dexamethasone-2 CC IV OD was administered in morning from day one to eleventh day, followed by 1 CC IV of same medication at night for six days i.e. day one to sixth day.
- Inj. Ceftriaxone 1 gm IV BD was given for seven days i.e. from day one to seventh day.
- Inj. Ranitidine of 50 mg IV BD was given for seven days.
- Inj. Avil 20 mg IV BD was administered on all days.

Ringer Lactate IV One drop per 100 ml/one hour was initiated from day one to eleven.

Fusidic acid 2% cream TID was prescribed as topical application from day four.

Liquid paraffin OD was recommended for day ten and eleven as local applicant.

The signs of SJS have been declined slowly after initiation of following medication. The patient was found to be confident enough for discharge and we have issued the Drug alert card as presented in (Figure 1) from Dept. of Pharmacy Practice on dated 06-01-2020 based on Naranjo's causality assessment scale.

DISCUSSION

During our daily ward rounds we came across a typical and rare case report of SJS which was provoked by either paracetamol 325 mg or amoxicillin 500 mg in female patient aged in late thirties [3]. A systematic review on drug-induced SJS on Indian subjects and came out with findings that involved 389 suspected drugs including paracetamol with 6.1% and antibiotics in particular amoxicillin 21% , the former being very rare and later has been common culprit in SJS/TEN. To further strengthen this case study involving antibiotics are which are known to have anamnesis of allergic drug reactions which are idiosyncratic, unforeseeable; non-dose dependent and iteratively immune mediated which categorically fall under Type B (bizarre reactions).

Further interesting in the present case study is gender i.e. female subject; which is very common and supported by an extensive review report carried out that in SJS/TEN age has no constraint, but females and geriatrics are more susceptible/vulnerable [4]. Apart from this he also mentioned that variety of strains, race, typical genetic factors, ethnicity in diverse population have played major attributing aspects for drug hypersensitivity.

Finally the most intriguing query in the present study remains in pandemonium because the subject was on both medications which share a similarities in all aspects like time duration to exhibit the reaction, type of reaction associated with immune system and both drugs paracetamol and amoxicillin have a history of causing SJS/TEN, of course the former one being very rare and later very common [5].

CONCLUSION

From the present case report, it shows the lacunas of prescribers knowledge regarding the assessment of cutaneous eruptions associated with NSAID's and amoxicillin Paracetamol is most vogue pill at length prescribed for its anti-pyretic effect as well as in mild to moderate severe pain. It also enjoys the credit of unharmed nature apart from its most economy and widely available as Over the Counter (OTC) pill and falls under World Health Organization's (WHO) essential drug list. It also suggests that clinical pharmacist has a pivotal role in health care sector particularly in the given situation as an exemplary.

REFERENCES

1. Frey N, et al. The Epidemiology of Stevens - Johnson syndrome and toxic epidermal necrolysis in the UK. *J Invest Dermatol.* 2017;137:1240-1247.
2. Fakoya AOJ, et al. Stevens - Johnson Syndrome and toxic epidermal necrolysis; Extensive review of reports of drug-induced etiologies, and possible therapeutic modalities. *Maced J Med Sci.* 2018;6:730-738.
3. Zaidi M, et al. Amoxicillin and clavulanic acid induced stevens-johnson syndrome: A case report. *Excli J.* 2017;16:748-751.
4. Patel TK, et al. A systematic review of the drug-induced Stevens-Johnson syndrome and toxic epidermal necrolysis in Indian population. *Indian J Dermatol Venereol Leprol.* 2013;79:389-398.
5. Roujeau JC, et al. Medication use and the risk of Stevens-Johnson syndrome or toxic epidermal necrolysis. *N Engl J Med.* 1995;333:1600-1607.