Case report on generalized bullous recurrent fixed drug eruption caused by co-trimoxazole

Sowmya Nadendla¹, Sahithi.Kalari², Shaik Shafiya, Nallani Venkata Rama Rao, Rama Rao Nadendla

Dept. of Pharmacy Practice, Chalapathi Institute of Pharmaceutical Sciences, Lam, Guntur - 522034, Andhra Pradesh, India.

*Corresponding author: Sowmya Nadendla
E-mail id: sowmyanadendla89@gmail.com

ABSTRACT
Fixed drug eruption is an allergic reaction to particular medicine. This is case of 65-year-old male patient with complaints of multiple discrete dusty macules over hands, legs and feet and various other areas associated with burning sensation with history of similar complaints in the past two to three times & on enquiry patient was prescribed co-trimoxazole by a local practitioner without taking adequate medication history. Cotrimoxazole was suspected as the offending drug in causing fixed drug eruption in this case and its role was confirmed by patch test. According to WHO-UMC & Naranjo assessment scales this adverse effect comes under possible adverse effect.

Keywords: Fixed drug eruption, cotrimoxazole; Patch test; UMC & Naranjo assessment.

INTRODUCTION
Fixed drug eruption (FDE) is a distinctive type of cutaneous drug reaction that characteristically recurs in the same locations upon re-exposure to the offending drug. Widespread bullous fixed drug eruption (FDE) is the most severe form of FDE and may be mistaken clinically for Stevens-Johnson syndrome or toxic epidermal necrolysis (SJS/TEN). It characteristically presents as a round, sharply circumscribed oedematous patch with violaceous or dusky erythema associated with pruritus or burning. The lesions heal with residual hyperpigmentation.

Common drugs causing fixed drug eruptions are fluconazole, ciprofloxacin, doxycycline clarithromycin, NSAIDs, trimethoprim, cotrimoxazole, phenytoin etc. Cotrimoxazole is a synergistic fixed dose combination of sulfamethoxazole and trimethoprim used in treatment of several infections including urinary, respiratory, gastrointestinal tract infections.

Re-challenging the patient to the suspected offending drug is the only known test to possibly identify the causative agent. Patch testing and oral provocation have been used to identify the suspected agent and check for cross sensitivities to medications. Skin biopsy is the diagnostic procedure of choice.

TREATMENT OF FDE
Treatment for fixed drug eruptions (FDEs) otherwise is symptomatic. Systemic antihistamines and topical corticosteroids may be all that are required. In cases in which infection is suspected, antibiotics and proper wound care are advised. Post inflammatory hyperpigmentation may take many months to resolve.

45
A regular diet is usually acceptable. However, food may be an exacerbating factor; reactivation has been reported with cashews, liquorice, lentils, and strawberries.

**CASE REPORT**
A 65 years old male patient admitted in dermatology department with chief complaints of blisters over hands, legs, feet and various other areas associated with burning sensation. On examination there were multiple discrete dusty hyper pigmented macules of about 10 in number extending all over body size ranging from 5X5 cm & 5X 20 cm over the axillae & genital scrotum oozing & crusting Patient is known case of hypertension and diabetes and he had history of similar episodes in the past 2 to 3 times. On taking detailed history, a correlation was found between the episodes and use of cotrimoxazole. After thorough history and cutaneous examination and patch testing, a bullous fixed drug eruption was confirmed as diagnosis.

**MANAGEMENT OF ADR**
- The antibiotic was stopped and topical corticosteroid (betamethasone 0.1%) was prescribed twice daily.
- Systemic antihistamines like Tab cetirizine 10 mg once daily & Tab chlorpheneramine maleate 8 mg once night was taken by the patient.
- Warm saline compresses & liquid paraffin (emollient) to treat conditions like itching & burning sensation.

**DISCUSSION**
The incidence of fixed drug eruption induced by a specific drug appears to depend on frequency of use. It is responsible for about 10% of all adverse drug reactions. The patho mechanism involves an antibody-dependent, cell-mediated cytotoxic response. CD8+ effector/memory T cells play an important role in reactivation of lesions with re-exposure to the offending drug.

**CONCLUSION**
Co-trimoxazole is considered to be the possible cause of FDE. Patch testing was shown to be a simple & safe method to confirm drug incompatibility in FDE mainly when multiple drugs are suspected. According to this case the possibility of a cutaneous adverse drug reaction should be considered by physician prescribing a long term intermittent antibiotic prophylaxis & some other drugs and Use of OTC drugs intended to cause FDE. The patients who are allergic to a drug of one class should be recommended a drug of another class instead of other drug from same class.

**ACKNOWLEDGEMENT**
I would like to thank my colleagues & my professors for guiding me in assessing the casual relationships of drugs and their effects. The authors are thankful to the Dr.Vani (Department of dermatology, government general hospital, Guntur, Andhra Pradesh, India) for providing all the facilities and support to carry out this work.
REFERENCES


