CASE REPORT

AZITHROMYCIN INDUCED FIXED DRUG ERUPTION

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INTRODUCTION: Fixed drug eruptions, first described by Brocq in 1894, is one of the commonest types of adverse cutaneous drug reaction.¹ FDE consists of recurrent eruptions characterized by erythematous to violaceous macules that subsequently evolve into a plaque. The lesions vary in size and can occur on any part of the skin and mucous membrane.² Azithromycin is a semisynthetic macrolide antibiotic approved for treating mild to moderate infections of the skin, soft tissues, lower and upper respiratory tracts.³ Pulse therapy with azithromycin is being increasingly used recently as a safe and effective treatment of acne vulgaris with excellent patient compliance.^{4,5} A very rare case of Fixed Drug Eruptions caused by Azithromycin is reported here.

KEYWORDS: Drug Eruptions, Azithromycin, IFN-Gamma.

CASE REPORT: A 61-year-old male suffering from pharyngitis was prescribed Azithromycin 500mg once in a day for 5 days. After stopping the drug, within a week, patient presents with sudden onset of multiple violaceous to hyperpigmented round to oval plaques on lateral aspects of both the thighs, the lesions subsided after 2 weeks without any medication. There was no significant past history of any adverse drug reactions in family members.

DISCUSSION: Fixed Drug Eruption (FDE) is characterized by sudden onset of sharply marginated round to oval itchy erythematous and edematous macules that evolve into dusky violaceous plaques on the skin and mucous membrane. After an initial acute phase lasting days to weeks, a residual grayish (or) slate-coloured hyperpigmentation develops.⁶ Usually the lesions are non-fatal, rarely become generalized and cause cosmetic embarrassment. FDE are responsible for 10% of all adverse drug reactions and occur in all ages, more common in young adults.²

The exact pathogenetic mechanism underlying FDE is still unclear. The most commonly accepted hypothesis is persistence of memory-T-cells in the affected skin.⁷ CD8⁺ T-cells phenotypically resembling effector memory-T-cells have been shown to be greatly enhanced along the epidermal basal layer in the FDE and these have capacity to produce large amounts of IFN-Gamma which is likely to play a significant role in the development of FDE.^{8,9}

Confirmation of diagnosis requires re-challenge with the incriminated drug by oral (or) topical provocation in the form of patch test, of which oral provocation test is considered superior. In our case, the clinical findings and the temporal association with the drug intake and the patient's history established Azithromycin to be the culprit in causing the Fixed Drug Eruption. Oral re-challenge and patch testing with azithromycin was refused by the patient and the lesions were also subsided.

This case is being reported to highlight a drug as safe as Azithromycin, may also be associated with serious Fixed Drug Eruptions and to make the Physicians, Dermatologists and Medical Practitioners Worldwide aware of this extremely rare case.

CASE REPORT

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The above figures are showing erythematous plaques on both the thighs

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