Fixed Drug Eruption due to Tinidazole with Cross-Reactivity with Metronidazole

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Sir,

A large number of drugs are capable of producing fixed drug eruptions [1]. The list has ever been on the increase. A case of fixed drug eruption due to tinidazole is being reported. There was a cross-sensitivity with metronidazole.

Case Report. A 32-year-old male patient was examined for a persistent hyperpigmented area over the left buttock of 2 months' duration. Initially it had appeared as an erythematous patch following ingestion of Fasigyn (tinidazole) prescribed for giardiasis. The erythema and the accompanying burning gradually subsided over a period of 5-6 days leaving behind the pigmented patch. There was no history of exacerbation of the lesion following ingestion of any other drug.

Examination revealed a slate-grey, 4 by 3 cm plaque over the left buttock. A diagnosis of fixed drug eruption was made and the patient subjected to provocation tests as detailed by Pasricha [2], with the following drugs: acetylsalicylic acid, paracetamol, co-trimoxazole, phenobarbitone, sulphadiazine, phenolphthalein, tetracycline and erythromycin. None of these drugs produced any activation of the lesion. Then Fasigyn (tinidazole) 500 mg was given as the challenging dose and in about 6 h the patient developed severe itching and marked erythema at the site of lesion on the buttock. Topical corticosteroids were prescribed and after the activity had subsided, the patient was given one tablet of Flagey 1 (metronidazole) 200 mg. Within 4 h of taking this drug, he again developed severe itching and intense erythema on the lesion over the buttock.

Comments. Tinidazole is being widely used in the treatment of giardiasis, amebiasis, trichomoniasis and anaerobic bacterial infections. Reported side effects pertain chiefly to the gastrointestinal system. Apart from report of an allergic skin reaction due to tinidazole in 1 patient in a multicenter study [3], there have been no reports of any adverse cutaneous reactions due to this drug.

Reappearance of lesion in response to a challenging dose of tinidazole confirms that the fixed eruption was caused by this drug. The patient also showed a cross-reactivity with metronidazole. Tinidazole has close structural resemblance to metronidazole (fig.1). It differs from metronidazole in having an ethyl group at position 2.

There have been only two instances of fixed drug eruptions due to metronidazole [4,5]. The purpose of this report is to alert the physician

C-N C-N
 $\text{C}_1\text{N}_2\text{C}_2\text{H}_4\text{N}_2\text{C}_1\text{H}_2\text{S}_2\text{O}_2\text{C}_2\text{H}_5$
 $\text{C}_1\text{N}_2\text{C}_2\text{H}_4\text{N}_2\text{C}_1\text{H}_2\text{S}_2\text{O}_2\text{C}_2\text{H}_5$

Metronidazole Tinidazole

Fig. 1. Close resemblance of tinidazole and metronidazole.

about the potential ability of tinidazole to produce fixed drug eruption. To the best of our knowledge, this is the first report of fixed eruption due to tinidazole where in addition cross-sensitivity was also observed with metronidazole.

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