

Fixed Drug Eruption due to Fluconazole: Not so uncommon Now-a-days

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Sir,

Fixed drug eruptions (FDEs) represent the most common cutaneous adverse drug reaction which is seen in the Indian scenario [1]. FDE is a distinctive drug-induced dermatosis with a characteristic recurrence at the same sites of the skin or mucous membrane, which occurs after repeated administrations of the causative drug [2]. It was first described by Bourns in 1889; five years later, it was termed by Brocq as "eruption erythemato-pigmentee fixe" [3]. The most common drugs which cause FDE are antibiotics, followed by nonsteroidal anti-inflammatory drugs (diclofenac, aspirin, naproxen, and ibuprofen) [2]. Fluconazole is one of the most common drugs which is used in dermatology practice.

We are reporting an FDE which occurred secondary to fluconazole intake. A 22-year-old woman received five doses of fluconazole (150 mg) orally, once a month, for recurrent vaginal candidiasis. A red erythematous macule which measured approximately 2 (two) centimetres in diameter, with well-defined and raised margins, appeared on the medial side of her right popliteal fossa, that was associated with burning and itching, four hours after she had taken her second dose of fluconazole. It faded, but a violet pigmentation developed after a week. A month later, she again developed two macules of similar dimensions within four hours of intake of another fluconazole dose. One of the lesions developed on exactly the same site where another had developed in the earlier episode and the other developed in the left popliteal fossa. After one week, the patches faded and hyperpigmented areas developed on the affected areas.

Our differential diagnosis included fixed drug eruption and erythema multiforme. Although fixed drug eruption is primarily a clinical diagnosis, we conducted an oral challenge test. An oral challenge test with fluconazole (150 mg) was conducted 4 weeks later and it showed similar signs, three hours after intake of the drug. A local provocation test was performed with 10% fluconazole in petrolatum on the left pigmented area and with 10% fluconazole in ethanol on the right pigmented area. For comparison, the same compounds were tested on normal skin of her back. After 15 hours, two red patches developed on both sides of her legs and none developed on her back. A skin biopsy specimen taken from the left popliteal area revealed a lichenoid infiltrate, a basal cell vacuolization,

dermal melanophages and a superficial perivascular lymphocytic infiltrate, which were consistent with features of FDE. The drug was dechallenged and the patient was treated with antihistaminics and steroids.

Contrary to this case, most of the previous studies done on FDEs caused by drugs had demonstrated higher occurrences in men as compared to those seen in women [4]. In the previous studies, all female patients were prescribed fluconazole for vaginal candidiasis, while male patients were prescribed fluconazole for *Candida balanitis* [5]. Cross-reactions may occur with structurally related agents such as itraconazole [6]. In almost all the cases, eruptions had occurred after a couple of drug administrations [7,8]. The only common medication which was used by the patients was fluconazole. The sites which were most affected for eruptions were limbs, palmar and plantar areas, as well as the oral cavity and lips [5-8].

Fluconazole is a commonly used antifungal agent, and a fixed drug eruption should be considered as a possible adverse effect of its use. This case highlights the importance of taking a comprehensive history of medication use and construction of a medication diary by the patient, to ascertain the occurrence of the eruptions after self-administering doses of fluconazole, when cutaneous adverse reactions are being examined.

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