

Symmetric Drug-related Intertriginous and Flexural Exanthema due to Itraconazole: An Uncommon Side Effect of a Commonly Used Drug

Sir,

Symmetrical drug-related intertriginous and flexural exanthema (SDRIFE) or (Baboon syndrome) is a symmetrical erythematous rash on the flexures after systemic exposure to a drug. This is distinct from other cutaneous drug reactions owing to its typical morphology, distribution, and absence of systemic findings. We report the case of a 43-year-old female presenting with SDRIFE after the first dose of itraconazole.

The patient was prescribed itraconazole 200 mg orally once daily for tinea cruris. After the first dose, she developed pruritus and minimal erythema over the neck, inframammary area, and groins. With continued medication, there was aggravation of symptoms in the form of extension of rash over the groin upto the medial thighs and involvement of other flexures in the next 3 days. Examination revealed bilaterally symmetrical sharply demarcated V-shaped erythematous macular exanthema over the neck [Figure 1], inframammary areas [Figure 2], and groin [Figure 3], extending to medial thighs and lower abdomen [Figure 3]. There was no evidence of any systemic involvement. Routine hematological and urine examinations were normal, except eosinophilia (11%). Histopathological examination revealed perivascular infiltration of lymphocytes and neutrophils [Figure 4a and 4b]. Patch test with the drug was negative and the patient did not consent for drug rechallenge. SDRIFE was diagnosed based on the clinical, and histopathological evidence as well as temporal association with the drug. Patient showed clinical improvement with intake of systemic

steroids and discontinuation of itraconazole within 5 days [Figure 5].

SDRIFE is defined as a benign and self-limiting drug eruption characterized by symmetrical involvement of the gluteal and intertriginous areas, occurring in the absence of systemic involvement.^[1] Previously, also referred as baboon syndrome, the term SDRIFE was proposed by Hausermann in 2004 as more appropriate for those reactions occurring after exposure to systemic drugs, regardless of prior sensitization.^[2]

SDRIFE is diagnosed by the following criteria:^[2]

- a. Exposure to a systemically administered drug either at the first or repeated dose
- b. Sharply demarcated erythema of the gluteal / perianal area and / or V-shaped erythema of the inguinal area
- c. Involvement of atleast one other intertriginous / flexural area
- d. Symmetry of the affected areas
- e. Absence of systemic symptoms and signs.

Among the medications causing SDRIFE, beta-lactam antibiotics, especially amoxicillin, are most common, others include pseudoephedrine, codeine, cimetidine, nystatin, and fluconazole.^[3] The exact mechanism involving SDRIFE is unknown although many reports have suggested a role of type 4 hypersensitivity.^[4] Histological features consist of a superficial perivascular inflammatory infiltrate of lymphocytes and occasional eosinophils.^[2] Approximately 50% of the cases have a positive patch test, while drug provocation test is positive in most patients.^[5] Itraconazole,



Figure 1: Well-defined macular bright red erythema with no surface change over the neck



Figure 2: Bright red erythema with well defined margins over the inframammary areas



Figure 3: Sharply demarcated erythema with scaling over the bilateral inguinal folds extending to the lower abdomen

a triazole antifungal agent has free azole nitrogen, which competes with the heme moiety of cytochrome P 450 for free oxygen, inhibiting ergosterol synthesis in the fungal cell membrane. Although itraconazole is one of the most commonly used systemic antifungal among dermatologists, cutaneous reactions are infrequent with it, and the documented reports include a generalized urticarial rash and acute generalized exanthematous pustulosis.^[6] Recently a case of SDRIFE induced by fluconazole, another triazole antifungal has been reported.^[7]

This case is being reported to enlighten the physicians with an uncommon rash induced by a drug prescribed routinely by dermatologists.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have

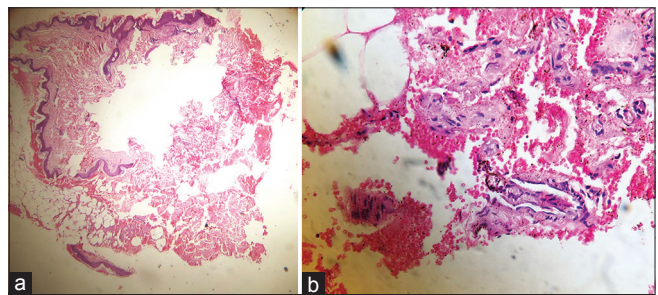


Figure 4: (a) Biopsy from the lesion showing orthokeratotic epidermis with sparse lymphocytic infiltrate in the dermis, H and E, x4 (b) At higher magnification, lymphocytic infiltrate and extravasated RBCs seen around a dermal blood vessel, H and E, x40

given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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Figure 5: Lesions on the groin subsiding with postinflammatory hyperpigmentation and scaling after treatment

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