Symmetrical Drug related Intertriginous and Flexural Exanthema after Ranitidine Therapy: A probable Causal Association in An 18-year-old Girl

Sir,

Symmetrical drug-related intertriginous and flexural exanthema (SDRIFE) is characterized by symmetrical erythema involving the gluteal and intertriginous areas in the absence of systemic involvement.[1] Penicillin and cephalosporins are the most common agent responsible for this eruption.[2] We report herein a case of SDRIFE showing symmetrical erythema predominantly on the major flexural areas that developed after taking ranitidine tablets and was probably associated with the use of ranitidine.

An 18-year-old girl presented with sharply demarcated, pruritic, erythematous, scaly lesions involving the neck, cubital fossa, and groin, with scattered erythematous, scaly papules, and plaques over the chest, forearm, and axillae [Figures 1 and 2]. She was taking tablet ranitidine for acidity for the last 1 week. There was no history of any other drug ingestion or history suggestive of viral infection. There was no history of taking of ranitidine in the past. There was no evidence of any systemic involvement. Routine hematological and urine examinations were normal. Histopathological examination revealed perivascular infiltration of lymphocytes and neutrophils. Patch test with the drug was negative and the patient did not consent for drug rechallenge. Naranjo causality score was 6 that implying “probable” causal association of ranitidine to SDRIFE.

The patient was prescribed a short course of systemic steroids and there was marked clinical improvement with intake of steroid and stoppage of ranitidine. There is no recurrence of the eruption after discontinuation of steroids. Rechallenge with the ranitidine was not attempted due to fear of recurrence.

SDRIFE is an uncommon peculiar type of cutaneous eruption that occurs after systemic administration of drug-related allergen.[3] It was previously called as baboon syndrome which is categorized under systemic contact dermatitis. Baboon syndrome is characterized by well-demarcated erythema over buttocks and flexures. It occurs after ingestion or systemic absorption of a contact allergen in a sensitized individual while no previous cutaneous sensitization is required in SDRIFE.[4] Diagnosis of SDRIFE requires the following criteria: (a) occurrence after exposure to systemic drugs, (b) sharply demarcated erythema of the buttocks and/or V-shaped erythema of the thighs, (c) involvement of at least one other flexural fold, (d) symmetry of the affected site, and (e) absence of systemic symptoms.[5] Our case has all these features. There is occlusion, sweating, excretion of drugs or metabolites from the eccrine gland, a recall phenomenon from previous mechanical stimulation, or intertrigo at flexural areas which are thought to be responsible for flexural
predilection.[6] Beta-lactam antibiotics such as penicillin and cephalosporins are the most common drugs responsible for SDRIFE.[7] Mercury, nickel, heparin, allopurinol, erythromycin, hydroxyurea, oxycodone, pseudoephedrine, aminophylline, terbutaline, barium sulfate, iodinated radiocontrast media, intravenous immunoglobulin, and cetuximab are other drugs causing this eruption.[8]

The exact mechanism involving SDRIFE is unknown, but it is thought to be a type IV hypersensitivity reaction.[7] Immunohistochemical evidence shows CD4 + T cell infiltration and increased endothelial and keratinocyte expression of CD62P which allows for T cell recruitment to the skin and hence supporting the role of type IV hypersensitivity in its pathogenesis.[8] Patch test is positive in approximately 50% of patients, but an oral provocation test is positive in most patients with SDRIFE.[9]

Systemic drug-related intertriginous and flexural exanthema is self-limited. Corticosteroids may be given to hasten recovery. Avoidance of systemic administration of precipitating drug is must.

Thus, we report a rare case SDRIFE probably induced by ranitidine. A dermatologist should be aware that the drugs such as ranitidine can cause symmetrical intertriginous or flexural erythema as in our case.

Declaration of patient consent

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