

## Fixed Drug Eruption to Palm Wine: A Case

Sir,

Fixed drug eruption (FDE) is characterized by skin lesions recurring at the same anatomical site upon repeated exposures to an offending agent. It is one of the most common cutaneous adverse drug reaction patterns in Indian patients. Antibacterial agents, quinine, oral contraceptives, nonsteroidal anti-inflammatory drugs, barbiturates, and food coloring are among the most common culprits causing FDE. It can also be induced by nondrug triggers such as food and ultraviolet radiation. Here, we report a case of FDE due to palm wine.

A 24-year-old male presented to skin OPD with chief complaint of multiple pruritic erythematous lesions over the trunk, both forearms, back, thighs, and legs for 3 days. Later, he developed central bulla over few of the preexisting erythematous lesions. The lesions were also associated with burning sensation. There was history of development of similar lesions at the same sites, twice in the past, a one-and-half year back, and each time they were associated with the intake of palm wine. There was no history of fever, abdominal pain or genital involvement. There was no drug intake prior to the onset of these lesions. On cutaneous examination, there were multiple discrete well-defined dusky red patches, with central fluid-filled bullae over few lesions, present over chest, abdomen, back, dorsa of both hands, thigh, legs, and buttocks [Figure 1]. Oral mucosa showed single well-defined fluid-filled bullae of approximate 2\*2 cm<sup>2</sup> in size present over palate [Figure 2]. Other mucosae were normal.

The clinical manifestations of FDE are sharply demarcated, round or oval itchy plaques of erythema and edema which becomes dusky violaceous or brown, and sometimes vesicular or bullous.<sup>[1]</sup> Most of the reactions develop within 30 min to

1 day of exposure to the offending agent (pharmacological/nonpharmacological). The lesions can be solitary or multiple and most common sites being the genitalia in males and the extremities in females.<sup>[2]</sup> Other sites such as perianal, periorbital, and trunk can also be involved.<sup>[1]</sup> The lesions can be bullous, pigmented, or nonpigmented. Pigmented lesions can be seen in pigmented individuals and heroin addicts. Nonpigmented lesions are reported with pseudoephedrine use.<sup>[3]</sup>

The characteristic histological findings of FDE include marked basal cell hydropic degeneration with pigmentary incontinence. There is scattered keratinocyte necrosis with eosinophilic cytoplasm and pyknotic nucleus (Civatte bodies) in the epidermis. Lymphocytes, histiocytes, and neutrophil polymorphs infiltration are evident in the upper dermis.<sup>[4]</sup>

The most common cause for fixed drug eruption is medication, in which case it is easy to point out culprit drug because of the temporal association between drug intake and skin lesion. However, FDEs can also develop with certain nonpharmacological agents, such as food coloring dyes and home remedies.<sup>[5]</sup>

Palm wine is an alcoholic beverage made from the sap of various species of palm trees such as the palmyra, date palms, and coconut palms. The palm wine composition depends on the stage of the tapping period in which it is consumed. Thus, ethanol concentration varies in the range of 1–6%, lactic acid concentration in the range of 0.1–0.5%, and acetic acid concentration varies between 0.02 and 0.4%. Previously, a case of nonpigmenting FDE caused by alcohol has been reported by Tsutsumi R *et al.* in 2016, while a case of classical FDE caused by alcohol has been reported by Zhang M *et al.* in 2019.<sup>[6,7]</sup>

To assess the relationship between adverse reaction and allergen, we used the Naranjo

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**Figure 1: Multiple erythematous lesion, few having bulla over the trunk, both forearms, back, thighs, and legs**

algorithm which supports that palm wine was the probable cause of FDE in our patient.

To conclude, clinicians should also consider the possibility of FDE in patients with the episodes of recurring skin eruptions after taking any nonpharmacological agent.

#### ***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



**Figure 2: Well-defined fluid-filled bullae over the oral mucosa**

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.

#### ***References***

1. Breathnach SM. Drug reactions. In: Burns T, Breathnach S, Cox N, Griffiths C, editors. *Rook's Textbook of Dermatology*. 8<sup>th</sup> ed. Oxford: Blackwell Science; 2010. p. 28-177.
2. Brahim N, Routier E, Raison-Peyron N, Tronquoy AF, Pouget-Jasson C, Amarger S, *et al.* A three-year-analysis of fixed drug eruptions in hospital settings in France. *Eur J Dermatol* 2010;20:461-4.
3. Hindioglu U, Sahin S. Nonpigmenting solitary fixed drug eruption caused by pseudoephedrine hydrochloride. *J Am Acad Dermatol* 1998;38:499-500.
4. Hiatt KM, Horn TD. Cutaneous toxicities of drugs. In: Elder DE, Elenitsas R, Johnson BL, Murphy GF, Xu X, editors. *Lever's Histopathology of the Skin*. 10<sup>th</sup> ed. New Delhi: Lippincott Williams and Wilkins; 2009. p. 311-31.
5. Tattersall I, Reddy BY. Fixed drug eruption due to achiote dye. *Case Rep Dermatol* 2016;8:14-8.
6. Tsutsumi R, Yoshida Y, Yamamoto O. Fixed alcohol eruption. *Contact Dermatitis* 2016;75:126-8.
7. Zhang M, Miao CY, Li Y, Zhang XY. Fixed drug eruption caused by drinking alcohol. *Clin Exp Dermatol* 2019;44:68-70.