Unusual presentation of severe pompholyx

Sir,

Pompholyx or dyskeratotic eczema is a type of hand eczema characterized by acute onset of vesicles usually over palms and soles. In severe cases, the lateral and dorsum of fingers can be involved.[1] Herein we report a case of pompholyx involving the dorsum of the hands and feet with hemorrhagic bullae.

A 25-year-old housewife presented with a history of fluid-filled lesions over the palms and soles since 10 days. Lesions were initially smaller, gradually progressed to involve the dorsum of the hands and feet, with pain and itching. There was no history of hyperhidrosis, or drug intake. Cutaneous examination revealed multiple haemorrhagic vesicles and bullae ranging from 1 × 1 cm to 3 × 3 cm over the palms, soles, dorsum of fingers and feet [Figure 1]. Lesions were nontender and Nikolsky sign was negative. A provisional diagnosis of pompholyx was made and the patient was investigated. Tzanck smear showed neutrophils, culture of the blister fluid was negative. Periodic acid schiff (PAS) was negative for fungal elements. Biopsy revealed features of spongiotic dermatitis [Figure 2]. Hematological and biochemical analysis was normal. Patch test did not reveal any reactivity. Direct immunofluorescence was negative. The patient was treated with topical steroids and systemic antihistamines. After five days of therapy, bullae showed no response with further involvement of the wrist and hemorrhagic bullae over the feet of 5 × 5 cm [Figures 3 and 4]. The patient was started on systemic steroids, following which a good response was seen within one week.

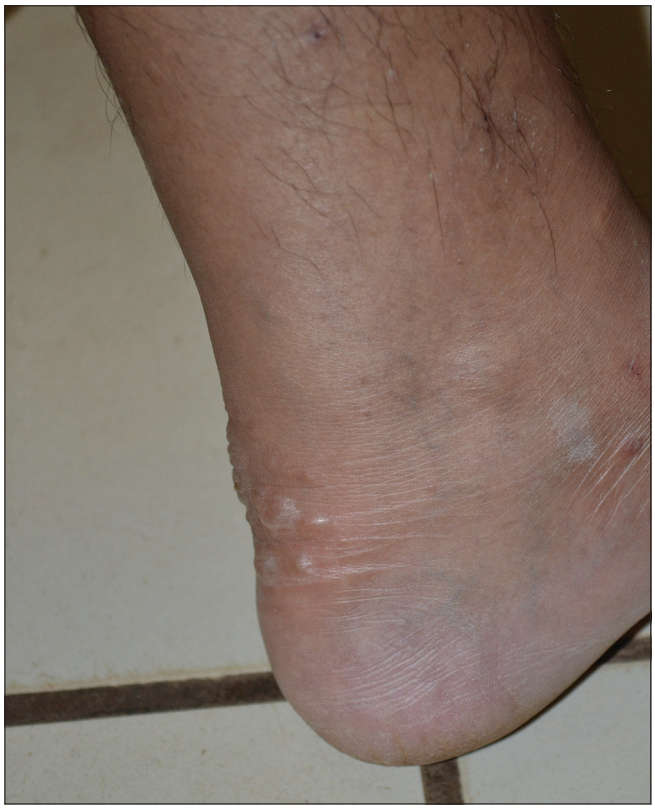

Figure 1: Vesicles over the heel

DISCUSSION

Pompholyx also called vesicular eczema of the hands and feet or dyshydrotic eczema is characterized by an rapid outbreak of deep-seated vesicles over the palms, the lateral aspects of the fingers, and sometimes the soles.[1,2]

Although the exact cause is unknown, the factors responsible for the occurrence or worsening of these lesions include like hot climate, palmoplantar hyperhidrosis, psychological stress, fungal infections, post-intravenous immunoglobulin therapy, ingestion of piroxicam, and ultraviolet A phototherapy.[1-3] Allergy to nickel, isopropyl paraphenylenediamine, dichromates, drugs, perfumes, and fragrance can induce or exacerbate these lesions.[1,3,4]

A classical pompholyx lesion usually presents in a symmetric pattern and is characterized by the sudden onset of crops of clear vesicles, which appear deeply seated and ‘‘sago-like.’’ In mild cases, the lesion usually present over the lateral aspect of the fingers, in severe cases the lesions may coalesce to form large bulla over the palm and soles. Recurrent attacks can involve the dorsa of the fingers and the nails may develop dystrophic changes, irregular transverse ridging and pitting, thickening and discoloration.[1] But in our case in addition to the bullae were over the palms, soles and dorsum of fingers,

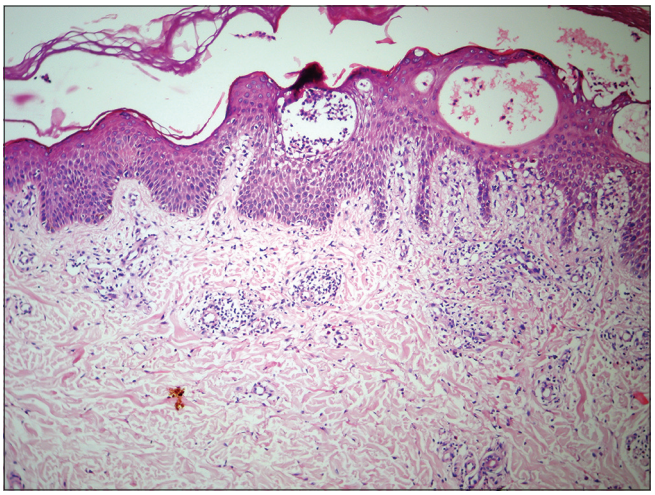

Figure 2: Features of spongiotic dermatitis (H and E, ×40)

Figure 3: Larger bulla over the dorsum of the hand and wrist

there was involvement of dorsum of the hand, extending on to the wrist with presence of hemorrhagic bullae over the feet. Though the common causes of hemorrhagic bullae are infections like necrotizing fascitis, autoimmune-blistering dermatoses, anticoagulant therapy, the occurrence of such lesions in pompholyx have never been mentioned in literature. In 80% of the cases, only the hands can be involved. The hands and feet, and the feet alone each account for about 10% of patients.[1] Itching and discomfort is seen in most cases. Pain is rarely seen in patients with secondary infections. The common differential diagnosis is chronic vesicular dermatitis, Id reaction, bullous pemphigoid, or linear immunoglobulin A disease.[1,2]

Histopathologically in acute lesions, spongiosis, intraepidermal vesiculation, superficial perivascular lymphohistiocytic infiltrate with exocytosis of lymphocytes into spongiotic zones is seen, with normal epidermal thickness and the compact, thickened stratum corneum of acral skin intact. Whereas in chronic lesions acanthosis and parakeratosis predominate and spongiosis decreases.[5]

Treatment includes topical preparations like diluted potassium permanganate or Burrow's solution, topical steroid or tacrolimus creams. In recurrent, severe or recalcitrant pompholyx lesions systemic steroids, low-dose methotrexate therapy and radiation therapy can be used. Similar treatment was required in one of our cases.[1]

In conclusion, we would like to highlight that in severe cases of this commonly occurring dermatoses, the bullae can be haemorrhagic and also involve the dorsum of the hand and feet.

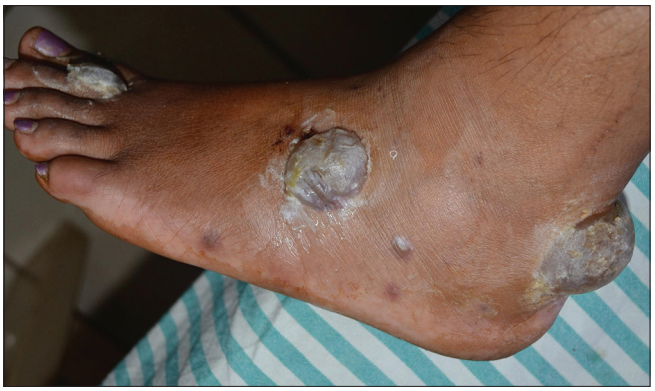

Figure 4: Hemorrhagic bulla over the dorsum of the feet

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