Localized purpuric lesions in a case of classical pityriasis rosea

Sir,

Pityriasis rosea is an acute inflammatory self-limiting dermatosis characterized by oval papulo-squamous lesions on the trunk and extremities. Its typical presentation is easily recognized. Many atypical forms are known which may be challenging to diagnose. Purpuric pityriasis rosea is an unusual variant with less than 15 cases reported in English literature.[1] We report a patient with typical pityriasis

rosea who developed purpuric lesions during the course of the disease that were confined to the upper extremities.

A 36-year-old male presented with a progressive eruption of mildly itchy erythematous papules and plaques mainly over the trunk with a few lesions on the extremities. Truncal lesions were arranged in a "Christmas tree" pattern and a single herald patch was seen on the medial aspect of the thigh. There was no history of recent upper respiratory tract infection or drug ingestion and there were no prodromal symptoms prior to appearance of the rash. A clinical diagnosis of Pityriasis rosea was made and the patient was prescribed oral erythromycin 500 mg 4 times daily for 7 days along with antihistamines and emollients.

Five days after starting erythromycin, the patient suddenly developed multiple bilaterally symmetrical, mildly itchy, tiny, flat, purpuric lesions over the anteo-medial aspect of both upper limbs [Figure 1a and b]. The older lesions [Figure 1c and d] continued to persist. Mucosae, palms, and soles were spared. There was no peripheral lymphadenopathy. Systemic examination was within normal limits. The differential diagnoses of purpuric pityriasis rosea, erythromycin-induced purpura, contact dermatitis and coexistent viral illness causing purpura were considered.

Skin biopsy of a purpuric lesion on the arm showed an acanthotic epidermis with mild hyperkeratosis, slight spongiosis and parakeratosis. The upper dermis had a sparse perivascular infiltrate of lymphocytes with several eosinophils and extravasated erythrocytes. There was no evidence of leukocytoclastic vasculitis [Figure 2a and b]. Other investigations including complete blood counts, blood sugar, Venereal Disease Research Laboratory (VDRL) test, HIV serology, antistreptolysin O titer, coagulation profile, and urine analysis did not reveal any abnormality.

The patient denied the use of non-prescriptional topical applications including home remedies and over-the-counter products. He was asked to stop erythromycin while emollients and antihistamines were continued. The purpuric lesions disappeared completely within 1 week of stopping erythromycin [Figure 3a and b] although the original lesions persisted and resolved only over the next 2 weeks. To rule out the possibilty of drug hypersensitivity due to erythromycin, 4 weeks

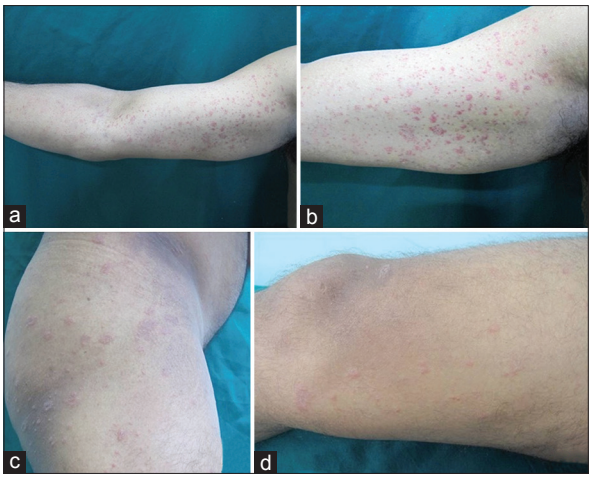

Figure 1: (a and b) Purpuric lesions over the flexor and medial aspect of right upper extremity. (c) Classical lesions of pityriasis rosea (PR) on lateral aspect of right thigh. (d) Classical lesions of PR on medial aspect of right thigh

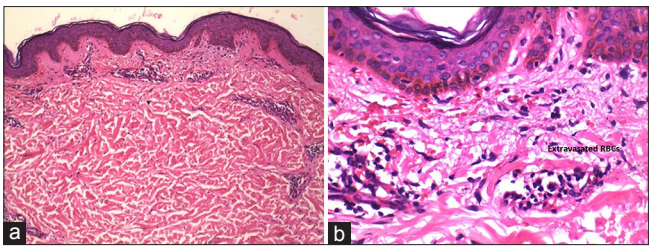

Figure 2: (a) Histopathology of the purpuric lesion showing a mildly thickened orthokeratotic stratum corneum with mild spongiosis and sparse perivascular infiltrate in upper and mid dermis. H and E stain, ×100. (b) H and E stain, ×400. Acanthotic epidermis with sparse perivascular infiltrate in upper dermis and numerous extravasated erythrocytes with no evidence of leucocytoclastic vasculitis. H and E stain, ×100

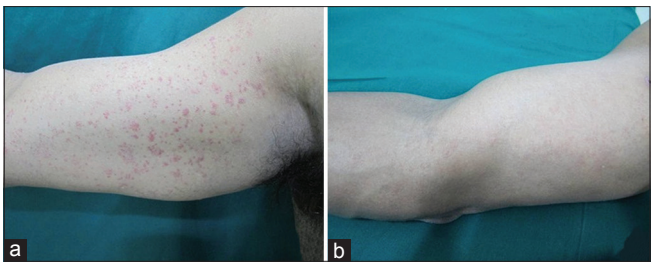

Figure 3: (a) Purpuric lesions of pityriasis rosea on right upper extremity. (b) Complete resolution of purpuric lesions of PR

after complete clinical resolution, we administered a challenge dose of 500 mg of erythromycin to the patient under clinical supervision and followed him up for one week thereafter. No recurrence of purpuric lesions was noted thus ruling out erythromycin-induced purpura and confirming the diagnosis of purpuric variant of pityriasis rosea.

Pityriasis rosea has been etiologically associated with viral infections, especially human herpes virus-6 and -7,

Table 1: Simple classification for atypical PR proposed by Chuh *et al*.[3]

Atypical presentations	Characteristics features
Atypical morphology of lesions: Atypical rash	Vesicular Purpuric Papular Hemorrhagic Urticarial
Atypical size of lesions	PR gigantea of Darier
Atypical distribution of lesions	Inverse PR (lesions on the extremities, flexural areas, and face) Limb-girdle type (the eruption is restricted to the shoulders or hips) Unilateral Localized (limited to a small area, such as the axilla or breast)
Atypical number of lesions	Pityriasis circinata et marginata (fewer and larger lesions often localized to the axillae or inguinal region)
Atypical site of lesions	Involvements of rare sites: Finger and toe tips, eyelids, penis, and oral cavity
Atypical severity of symptoms	PR irritata: Severe itch, pain, and burning sensation
Atypical course of the eruption	Recurrent or relapsed cases. Recurrent episodes have been estimated to occur in upto 3.5% of cases

PR: Pityriasis rosea

recent upper respiratory tract infections and several drugs, including barbiturates, clonidine, captopril, omeprazole, imatinib, isotretinoin, D-penicillamine, terbinafine, arsenicals, bismuth, and gold compounds. "Atypical pityriasis rosea" refers to cases presenting with atypical morphology or distribution of lesions and may be seen in approximately 20% of patients.[2] Various atypical types have been reported [Table 1].[3] Purpuric pityriasis rosea is a rare variant, first described by Hartman in 1944.[4] It is characterized by round to oval purpuric macules or papules over the trunk and limbs. Extravasation of erythrocytes without any evidence of capillaritis or vasculitis is a characteristic histopathological finding. The course and prognosis of purpuric pityriasis rosea have been described to be similar to classical disease and emollients and oral antihistamines are often the only treatment required. However, purpuric pityriasis rosea may not always be benign. A case of purpuric pityriasis rosea associated with myeloid leukemia has been reported.[5] Therefore, careful clinical examination, appropriate investigations and good follow-up is a must in all cases of atypical pityriasis rosea, especially the purpuric variant. Antibiotics such as erythromycin and other macrolides have shown to have some beneficial effect, but according to a recent study, azithromycin does not affect the course of pityriasis rosea.[6]

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