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Pityriasis rosea: two cases with uncommon presentations of common disease

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Abstract

Pityriasis rosea (PR) is an acute, self-limited papulosquamous dermatosis localized on the trunk and extremities, that affects otherwise healthy adolescents and young adults. Although the classic presentation is readily recognized, atypical forms may present a challenge. Many atypical forms of the disease have been reported in the literature.[1] We report two cases with atypical features. Involvement of nail folds and web spaces of hands was seen in one case while vesicles on the erythematous base were seen in other.

Key words: Pityriasis rosea, atypical, vesicular, nail folds exfoliation

Introduction

Pityriasis rosea (PR), first named as such by Gibert in 1860, is a fairly common dermatosis. In its classic form, the initial lesion, also called the herald patch, is larger than the subsequent lesions. Days to weeks later crops of smaller macules, papules, and plaques begin to appear. Multiple oval scaly pink lesions with typical collarette of scales, are distributed in the so-called "Christmas tree" pattern following skin cleavage lines on the trunk.[2] When all these features are present, diagnosis is easiest to establish. However, atypical variants and unusual presentations can be more challenging to diagnose and requires a more astute observer.[1,3]

Two cases of PR, with atypical presentations are being described in this report.

Case report

Case one

A 30-year-old man presented with multiple asymptomatic red raised scaly lesions, mainly on upper extremities and few on abdomen since last 1 week. There was no history of any preceding coryzal symptoms, herald patch, unprotected sexual exposure, vaccination, drug intake or

photosensitivity. Examination revealed discrete erythematous scaly patches of variable size on arms, forearms, proximal nail folds, palms and web spaces of bilateral hands. On closer examination, the rash showed peripheral collarette scaling over arms and forearms. **(Fig1)** The face, scalp, trunk, soles and mucous membranes including genitalia were uninvolved.



Fig 1: (a) closer view of lesions on arm showing typical collarette scales, (b) Erythematous scaly plaques with exfoliation on proximal nail folds and web spaces of left hand and (c) involvement of palm

Based on above findings, a diagnosis of secondary syphilis, atypical PR and pityriasis lichenoides chronica were thought.

His complete blood picture, liver function tests and clotting profile were normal. VDRL, HIV antibodies and antinuclear antibodies were negative. Potassium hydroxide mount of scraping from scales revealed no fungi.

Biopsy from representative lesion showed focal parakeratosis, mild epidermal hyperplasia and spongiotic vesicles in epidermis containing lymphocytes, papillary dermal edema, extravasation of RBCs around superficial vascular plexus along with moderately dense perivascular lymphocytic infiltrate. **(Fig 2)** Based on clinicopathological correlation, a diagnosis of atypical PR with nail fold, web space and palm involvement was made.

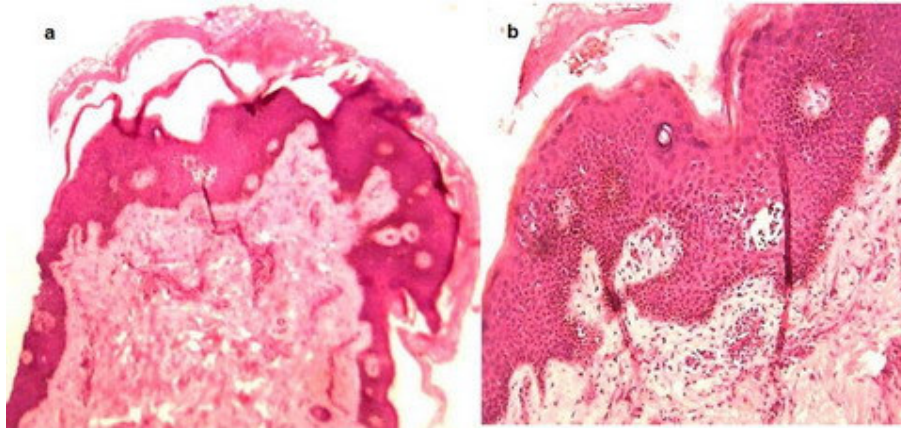


Fig 2: (a) Low power view showing epidermal hyperplasia with superficial perivascular infiltrate (H&E, 40X) (b) Perivascular lymphocytic infiltrate with extravasation of RBCs, spongiotic vesicle in epidermis containing lymphocytes. (H&E, 100X)

Patient was given oral erythromycin 2gm per day in four divided doses for 7 days along with topical mid potent steroid cream and moisturizers. Lesions did not increase and patient reported improvement after 2 weeks. Lesions cleared completely over 4 weeks.

Case two

A 28- year old unmarried male presented with multiple asymptomatic red raised and fluid filled lesions on his abdomen and lower back since 3 days. Recently he noted that lesions are increasing in number and new lesions are coming on upper extremities. There was no history of any preceding coryzal symptoms, herald patch, unprotected sexual exposure, vaccination, drug intake or photosensitivity.

Examination revealed multiple discrete erythematous, edematous papules and vesicles on erythematous base, involving mainly abdomen, lower back and few on upper extremities. Size of vesicles was variable with largest being up to 0.2- 0.5cm in diameter. No scaly plaques were seen. On closer examination, there was tiny crust at the top of some vesicles. (**Fig 3**) Vesicles were distributed along the lines of cleavage. The face, scalp, lower extremities, palms, soles and mucous membranes including genitalia were uninvolved. He denied application of any irritant application locally. There was no evidence of any other skin infection on his body.



Fig 3: (a) Multiple edematous papules and vesicles over abdomen (b) Similar lesions on lower back (c) Closer view of abdominal lesions showing multiple vesicles of variable size. (d) Closer view of lesions on back

Based on above findings, a diagnosis of Id eruption, vesicular PR and irritant contact dermatitis were thought.

His complete blood picture, liver function tests and clotting profile were normal. VDRL, HIV antibodies and antinuclear antibodies were negative. His routine stool and urine examination with microscopy revealed no abnormality. Biopsy from one of the vesicle was done. It showed focal parakeratosis, moderate epidermal hyperplasia, large intraepidermal spongiotic vesicles with exocytosis of lymphocytes papillary dermal edema, extra-vasation of RBCs around superficial vascular plexus along with moderately dense perivascular lymphocytic infiltrate. **(Fig 4)** Based on clinicopathological correlation, a diagnosis of vesicular PR was made.

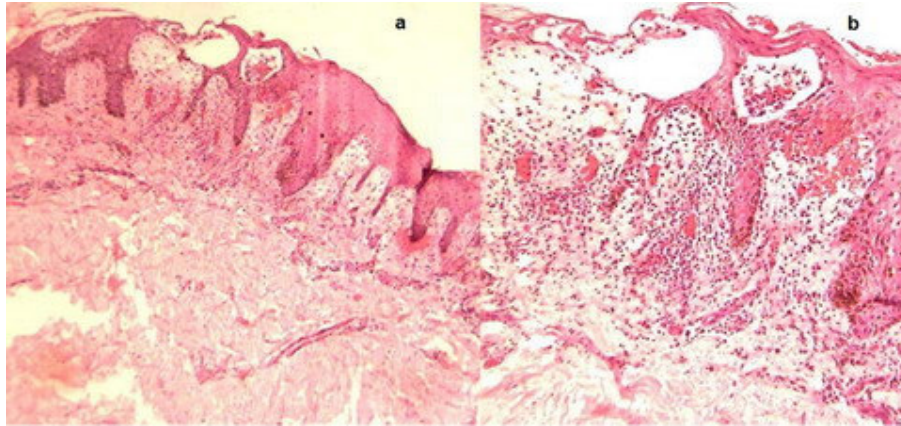


Fig 4: (a) Scanner view showing epidermal hyperplasia, intraepidermal spongiotic vesicles, papillary dermal edema and dense perivascular infiltrate (H&E, 40X)
 (b) Subcorneal and intraepidermal spongiotic vesicles containing lymphocytes, RBCs, congested vessels with extravasation of RBCs and dense perivascular lymphocytic infiltrate around superficial vascular plexus. (H&E, 100X)

Patient was given oral erythromycin 2gm per day in four divided doses for 7 days, single triamcinolone acetate 40mg intramuscular injection along with topical mid potent steroid cream and calamine lotion. Lesions did not increase in number and patient reported improvement over 3 weeks with nearly complete clearance.

Discussion

Pityriasis rosea is an inflammatory skin disease characterized by erythematous papulosquamous eruptions localized on the trunk and extremities. The eruptions are self-limiting and usually disappear gradually in 2-10 weeks without any treatment. Although no etiology has been proven, viral agents especially human herpes virus 6 and 7, autoimmunity, many drugs and psychogenic status have been proposed as possible etiological factors.[1,4,5]

Though diagnosis of PR is straight forward in its classic form, atypical cases may be missed easily and misdiagnosed.[1] Atypical variants of PR are rare, constituting approximately 20 percent of all cases. [6] Atypical types can be differentiated by size (PR gigantea of Darier, Papular PR), distribution (Cephalic PR, inverse PR, unilateralis PR, localized PR and pityriasis circinata et marginata of Vidal), sites involved (face, scalp, hands and feet fingers, toe tips, eyelids, penis and oral cavity), severity (PR irritata with severe itch, pain and a burning sensation), course of the lesions (like relapse, recurrent PR, annual relapse) and morphology. [1,3,4,7]

According to morphology, atypical forms of PR are described which includes, generalized papular, vesicular, purpuric (hemorrhagic), urticarial, pustular and erythema multiforme like PR. Additionally, drug-induced PR-like eruptions have been reported as separate clinical entity. [3,4]

In first case described here, atypical features included lack of involvement of back and Christmas tree pattern, involvement of palms along with web spaces and proximal nail folds of

bilateral hand fingers with exfoliation along with typical papulosquamous plaques with collarette scales. (Figure-1) We could not find report of nail fold exfoliation in PR with involvement of web spaces in literature.

In second case, atypical features includes, vesicular lesions on erythematous base with variable size from 2mm to 5mm without typical papulosquamous eruption of typical PR, and lack of herald patch.

Only a few vesicular PR cases have been reported in the literature and it is seen more frequently in children and young adults. The vesicular lesions may settle on the palms, soles, face or anterior forearm resembling varicella or dishydrosis.[3,4,8] No palmar lesions were seen in our case. The vesicles are usually associated with typical papulosquamous eruptions [3,9] . In our case there were only vesicles. Good response to erythromycin treatment as shown by Miranda et al. and in our second case, may be due to anti-inflammatory and immunomodulatory properties attributed to erythromycin or antibacterial action against Streptococcus, Chlamydia, Legionella and Mycoplasma which are thought to be etiological agents for upper respiratory tract infection, which can be a cause of PR as per previous literature. [3,10,11]

The diagnosis was based on clinical appearance of the lesions and histopathological findings in both the cases. There was no suggestion of herald patch in both the cases. In both the cases lesions subsided over a period of 6-8 weeks and patients are free of symptoms as per communication. There was no residual pigmentary change or scarring noted in both cases and no recurrence is seen till now.

Atypical cases of pityriasis rosea (PR) are fairly common and less readily recognized. Physicians should be aware of the wide spectrum of PR variants so that appropriate management and reassurance can be offered. Two cases described here would help to increase recognition of PR.

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