## Unilateral pityriasis rosea in a child: A rare clinical presentation

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Pityriasis rosea is a common papulosquamous disorder with occasional variations in lesion morphology, distribution, number and course of disease. The lesions are classically arranged with their long axes parallel to the Langer's lines of cleavage and typically affect the trunk and the proximal extremities. Variations in the distribution of pityriasis rosea include inversus, localized, and unilateral forms. The unilateral form is a very rare variant of pityriasis rosea, particularly in children. We report a 15-year-old boy with pityriasis rosea demonstrating unilateral localization.

Key words: atypical, pityriasis rosea, unilateral pityriasis rosea.

Pityriasis rosea (PR) is an acute self-limiting papulo-squamous eruption. It presents as a primary plaque (herald patch), which is followed by a generalized secondary rash after 1 or 2 weeks. The eruption affects the trunk and the proximal extremities<sup>1</sup>. However, some cases of PR are not typical in morphology and distribution. Such cases are called atypical PR<sup>2</sup>.

## Case Report

A 15-year-old boy presented with a well-defined salmon-colored, slightly pruritic plaques over the left side of his lower back that had been present for two weeks. The patient first noticed a big plaque, which was followed by new smaller plaques of various sizes. The majority ranged in size from 3 to 5 cm in diameter. The patient has no history of infection, insect bites, atopic dermatitis or drug intake.

Examination revealed multiple discrete, annular and erythematous plaques with peripheral collarette of scales, distributed with their long axes following the lines of cleavage of the skin on the left side of the lower back (Figs.1 and 2). The distribution of the lesions corresponded with the T8-L2 dermatomes. His oral mucosa, palms and soles were not affected and the skin examination was unremarkable in the remaining parts of the body. The potassium hydroxide (KOH) preparation for fungus was negative. Hematological investigations including complete blood counts and fasting glucose were normal. The Venereal Disease Research Laboratory test result was non-reactive and the human immunodeficiency virus (HIV) antibodies were negative. The patient did not give consent for skin biopsy. We thought that the most diagnostic label for this condition was PR. We treated him with mometasone furoate cream 0.1%, to be applied twice a day, and desloratadine tablet 5 mg daily for 10 days. Six months later, the lesions had completely resolved.

Written informed consent was obtained from patient's family.

## Discussion

Pityriasis rosea manifests as an acute, papulosquamous eruption with a duration of 6-8 weeks. The lesions are usually confined to the trunk and the upper third of the arms and legs. It most commonly occurs between the ages of 10 and 35. Even though the etiopathogenesis is not clearly understood, possible causative factors are infectious agents (human herpesvirus-6 and human herpesvirus-7), medications and environmental factors<sup>3,4</sup>. The initial large eruption (herald

plaque) and the subsequent smaller ones comprise oval scaly erythematous plaques with peripheral collarette scaling. The lesions are observed to be distributed with their long axes following the lines of cleavage (Langer's lines) and forming a typical 'Christmas tree' pattern. The histological findings are not specific. The biopsy specimen shows superficial perivascular dermatitis. A classical presentation is easily diagnosed clinically, but atypical variants often pose diagnostic difficulties<sup>1,5,6</sup>. Atypical presentations of PR are observed in about 20% of the patients<sup>1,2,4</sup>. Atypical PR differs from classical PR in terms of morphology, size of the lesions, number, distribution and clinical course, and often poses a diagnostic problem. Several atypical morphological



Fig. 1. A large annular herald patch on the lower back with multiple secondary lesions. The distribution of the lesions corresponds with the T8-L2 dermatomes.

variants have been described, namely papular, plaque, erythema multiforme-like, purpuric, bullous, lichenoid, gigantic plaque, vesicular or hemorrhagic and urticarial<sup>2</sup>. Variations in the distribution of PR include inversus, localized. segmental and unilateral forms<sup>7</sup>. Atypical variants are rarely seen in children. To the best of our knowledge, only seven cases with unilateral PR were reported previously<sup>4,8-13</sup>. Six of the reported cases were adults, in four of them lesions were located on the trunk, in two of them were located on the lower extremity<sup>4,8-12</sup>. Only one child with unilateral involvement was reported and the lesion of this case was located on the extremity<sup>13</sup>. In our case, the lesion was located on the trunk unilaterally, so this case is different from the others.

Tinea corporis, atopic dermatitis, secondary syphilis, psoriasis and drug eruptions are considered in the differential diagnosis<sup>8</sup>. Clinical history, KOH preparation, blood tests and histopatological examination help in the differential diagnosis. Considering the appearance of a large plaque (herald plaque), subsequent oval scaly plaques with collarette scaling, laboratory findings and KOH preparation, we believe that unilateral PR is an appropriate diagnosis for this case<sup>5</sup>.

In conclusion, careful history and clinical evaluation are important to avoid a misdiagnosis of PR. This report presents a rare, unilateral PR pediatric case with one-sided involvement.



Fig. 2. Close view of individual secondary eruptions showing peripheral collarette scales.

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