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Unilateral rash on a baby girl

A pruritic rash on just the right leg, arm, and flank

n 11-month-old baby girl came to the clinic with a pruritic rash. The rash initially appeared in her popliteal fossa 2 weeks before the visit. The eruption extended to the right leg, arm, and flank the week before the visit, subsequently spreading to the contralateral flank. Three weeks before to the eruption's appearance, the patient had an upper respiratory infection with a dry nonproductive cough, which resolved spontaneously without antibiotics.

The physical examination revealed a healthy-appearing infant girl with excoriat-

FIGURE 1 The right side has a rash...



An eruption involving the infant's right side.

ed erythematous papules coalescing into plaques on her right flexural arm that continued to the axilla and down the right flank to the flexural aspect of her leg (FIGURE 1). Her left side was essentially free of any rash (FIGURE 2). No cervical or axillary lymphadenopathy was noted, and the remainder of her exam was normal.

- What is your diagnosis?
- How would you manage this condition?

FIGURE 2 ...and the left side is clear



Left side shows clear skin with a few papules.

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Diagnosis: Asymmetric periflexural exanthem of childhood

Asymmetric periflexural exanthem of childhood (APEC) is a diagnosis defined by its unique clinical presentation. Since its original description in 1962 by Brunner¹ as a new papular erythema of childhood, a number of names have been used to describe the same clinical process: unilateral laterothoracic exanthema,² asymmetric periflexural exanthem of childhood,³ and lichen miliaris.⁴

Clinical picture of APEC

The initial clinical finding is a unilateral erythematous macular and papular eruption, often beginning in or around the axilla. Over the following 1 to 3 weeks, centrifugal spread involves the upper and lower extremities. Approximately 70% of APEC cases have involvement of the contralateral trunk. Despite the progression to the contralateral side, the eruption remains asymmetric throughout its course.

Additional findings include lymphadenopathy and pruritus in 70% and 65% of cases, respectively.³⁻⁵ In contrast to other exanthems, APEC rarely involves the face.⁵ A study by Coustou reported that 60% of cases had a preceding prodrome including rhinitis, pharyngitis, otitis, and fever.^{4,5}

Cause is unknown

Although the precise cause of APEC is not known, it has features consistent with a viral exanthem. A viral source is supported by a springtime and pediatric predominance with spontaneous resolution. In addition, 1 adult case of APEC has been attributed to an acute Parvo B19 infection.⁶

However, consistent serologic evidence supporting a viral cause is lacking,^{2,7} and no human transmissions have been documented except for reports of 2 familial cases.⁸ Some have proposed that this could be a childhood form of pityriasis rosea possibly caused by human herpes virus 7.⁴

Differential diagnosis

The differential diagnosis for APEC includes viral exanthems, eczema, scabies, pityriasis rosea, contact dermatitis, and miliaria (heat rash). APEC mainly affects children aged 2 to 3 years but can occur at a younger age. There are no laboratory tests that help establish the diagnosis of APEC. The diagnosis is based on the clinical picture of an asymmetric macular and papular exanthem in a young child with a viral-like prodrome.

Treatment and outcome

There is no specific treatment for APEC other than to treat the symptoms. No treatment has been shown to shorten the course of this disease. A low-potency topical steroid along with an antihistamine provides adequate symptomatic treatment.

This child had no significant symptoms and therefore no medications were prescribed. The parents were told they may get 1% hydrocortisone cream over-the-counter if their daughter developed troublesome itching. Reassurance was provided about the limited nature of this exanthem. The parents were advised to bring the child for follow-up if the rash did not completely resolve in 2 months. By the time for the child's 1-year check-up, the rash was gone.

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FAST TRACK

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