PHOTO ROUNDS

Two cases of asymmetric papules

Both of these young patients presented with rashes that had spread from their abdomen to their arms and legs—but only on one side.

CASE 1 ▶

A 3-year-old boy was brought to our emergency department for evaluation of skin lesions that he'd had for 7 days. The boy would sometimes scratch the lesions, which began on his right flank as erythematous micropapules and later spread to his right lateral thigh and inner arm (FIGURE 1). His lymph nodes were not palpable.

The boy's parents had been told to use a topical corticosteroid, but the rash did not improve. His family denied fever or other previous infectious or systemic symptoms, and said that he hadn't come into contact with any irritants or allergenic substances.

CASE 2

A 13-year-old girl came to our emergency department with a pruriginous rash on her

right leg and abdomen that she'd had for 4 days (FIGURE 2). The millimetric papules had also spread to the right side of her trunk, her right arm and armpit, and her inner thigh. Before the rash, she'd had a fever, otalgia, and conjunctivitis. We noted redness of her left conjunctiva, eardrum, and pharynx. The girl's lymph nodes were not palpable. Serologic examinations for Epstein-Barr virus, cytomegalovirus, rubella, parvovirus B19, and *Mycoplasma* were negative.

- O WHAT IS YOUR DIAGNOSIS?
- O HOW WOULD YOU TREAT THESE PATIENTS?

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Erythematous micropapules on boy's right flank



Pruriginous rash on right side of 13-year-old girl's abdomen



Dx: Asymmetric periflexural exanthem of childhood

Both of these patients were given a diagnosis of asymmetric periflexural exanthem of childhood (APEC), based on the appearance and distribution of the rashes.

A rare condition that mostly affects young children

APEC is a rash of unknown cause, although epidemiologic and clinical findings support a viral etiology. Cases of this rash were first reported in 1992 by Bodemer et al, and a year later, Taïeb et al reported new cases, establishing the term "asymmetric periflexural exanthem." 1,2 Several viruses have been related to APEC (including adenovirus, parvovirus B19, parainfluenza 2 and 3, and human herpesvirus 7), but none of these has been consistently associated with the rash. 3-5

APEC tends to affect children between one and 5 years of age, but adult cases have been reported.^{6,7} The condition occurs slightly more frequently among females and more often in winter and spring.^{6,9} APEC is a rare condition; since 1992, there have only been about 300 cases reported in the literature.¹⁰

■ What you'll see. The erythematous rash appears as an asymmetrical or unilateral papular, scarlatiniform, or eczematous exanthema. It initially affects the axilla or groin and may then progress to the extremities and trunk. Minor lesions infrequently present on the contralateral side. Most children who are affected by APEC are otherwise healthy and asymptomatic at presentation. The exanthem is occasionally pruritic and can be preceded by short respiratory or gastrointestinal prodromes or a low-grade fever.^{2,9} If the rash predominantly affects the lateral thoracic wall, it may be referred to as unilateral laterothoracic exanthem.¹¹ Regional lymphadenopathies can often be found, and there is no systemic involvement.

The distribution of the rash helps to distinguish the condition

The differential diagnosis for this type of exanthem includes drug eruptions, pityriasis rosea, miliaria, scarlet fever, papular acrodermatitis of childhood, and other viral rashes. The asymmetric distribution of APEC helps to distinguish the condition. Other possible asymmetric skin

lesions, such as contact dermatitis, tinea corporis, or lichen striatus, can be differentiated by the characteristics of the cutaneous lesions. Contact dermatitis lesions are more vesicular, pruritic, and related to the contact area. Tinea corporis lesions tend to be smaller, circular, well-limited, and often have pustules. Lichen striatus starts as small pink-, red-, or flesh-colored spots that join together to form a dull red and slightly scaly linear band over the course of one or 2 weeks. ¹² Because APEC is self-limiting, a skin biopsy is usually not necessary. ¹³

Lesions usually persist for one to 6 weeks and resolve with no sequelae. Only symptomatic treatment is required. Topical emollients, topical corticosteroids, or oral antihistamines can be used, if necessary.

Our patients. Both patients were treated with oral antihistamines and the rashes completely resolved within 2 to 3 weeks.

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