

## THE CLINICAL PICTURE

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# The Clinical Picture

## A rash after streptococcal infection



The typical appearance of the rash is often sufficient to confirm the diagnosis

**FIGURE 1**

**A** PREVIOUSLY HEALTHY 39-YEAR-OLD woman presented to the emergency department with 7 days of a gradually worsening rash. One week before the onset of the rash, her primary care physician had diagnosed streptococcal pharyngitis, for which she was  
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treated with oral amoxicillin. She had no history of skin or joint problems and was not currently taking any medications.

She was afebrile and her vital signs were normal. She had mild pharyngeal erythema but no palpable cervical lymph nodes. The

skin examination showed well demarcated, erythematous papules 1 cm in diameter, with overlying scales over the entire body, sparing the palms and the soles of the feet (FIGURE 1).

**Q:** Which is the most likely diagnosis?

- Impetigo
- Drug reaction
- Guttate psoriasis
- Nummular eczema
- Pityriasis rosea

**A:** The most likely diagnosis is guttate psoriasis.

Guttate psoriasis is a relatively uncommon condition that affects less than 2% of patients with psoriasis, primarily children and young adults. It is strongly associated with recent or concomitant beta-hemolytic streptococcal infection.<sup>1</sup> The rash usually develops 1 to 2 weeks after the streptococcal pharyngitis or upper respiratory tract infection. Other organisms involved in guttate psoriasis are *Staphylococcus aureus*, *Candida*, and viruses such as human papillomavirus, human immunodeficiency virus, and human endogenous retrovirus.<sup>2</sup> Several commonly used drugs are also implicated in psoriasiform eruptions, including beta-blockers, nonsteroidal anti-inflammatory drugs, angiotensin-converting enzyme inhibitors, lithium, metformin, and digoxin.

Acute onset of skin lesions caused by streptococcal infection can be either the first manifestation in a previously unaffected person or an acute exacerbation of long-standing psoriasis. Skin lesions are usually scaly, erythematous, and guttate (drop-shaped); they

primarily involve the trunk but can spread to the rest of the body, sparing the palms and soles.

Throat culture should be done to confirm streptococcal infection. Titers of antistreptolysin O are elevated in more than half of patients with guttate psoriasis. Histopathologic examination can differentiate guttate psoriasis from other psoriasiform conditions, such as pityriasis rosea, secondary syphilis, and lichen simplex chronicus; however, the clinical appearance of the rash is so characteristic that biopsy is not usually needed to confirm the diagnosis.

Guttate psoriasis responds well to phototherapy with ultraviolet B radiation and medium-potency topical corticosteroids.<sup>3</sup> And since streptococcal throat infection triggers the condition, it must also be treated for complete recovery.

### ■ CASE CONTINUED

Our patient was treated with topical steroid creams. Her rash improved slowly and had completely resolved in 6 weeks. ■

### ■ REFERENCES

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