

CLINICAL IMAGE

A CASE OF GUTTATE PSORIASIS

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CASE PRESENTATION

A 24-year-old healthy male soldier presented with a chief complaint of a rash that he first noticed 2–3 days prior. The lesions were noticed first on his arms, although he also noted lesions on both his trunk and legs. The patient denied recent illness such as sore throat or other upper respiratory symptoms. He reported that lesions were mildly itchy but otherwise did not report pain or other associated symptoms. He has no history of similar rash in the past. His family history is noncontributory. He does not have a personal or family history of a known autoimmune disorder or psoriasis.

The exam revealed numerous well-demarcated 1- to 10-mm pink papules coalescing into occasional plaques with overlying fine scale distributed throughout his upper extremities, trunk, and proximal lower extremities (Figures 1 and 2). The remainder of the exam was unremarkable. A punch biopsy was performed, which revealed findings consistent with guttate psoriasis. The patient was referred to a dermatologist, where he was treated with narrow-band ultraviolet B (UVB) phototherapy.

EDUCATION

Psoriasis is a chronic, inflammatory, multisystem disease that occurs in up to 2% of the world population.¹ This condition most commonly involves the skin but can also involve nails and joints. Several distinct variants of psoriasis exist, including plaque psoriasis, guttate psoriasis, generalized or localized pustular psoriasis, and erythrodermic psoriasis.² The most common type of psoriasis is the plaque form of psoriasis, which represents more than 90% of all variants of psoriasis and is commonly recognized through skin lesions characterized by round, erythematous plaques with a loosely adherent silvery white scale. Plaque psoriasis also most commonly appears symmetrically over the elbows, knees, and scalp.^{3,4}

Guttate psoriasis differs from the more common plaque psoriasis in several ways. For example, it is often of abrupt onset and is more commonly seen in children and adolescents. A history of an upper

respiratory infection such as streptococcal pharyngitis often occurs 1–3 weeks prior to the onset of this condition.^{1,2} Guttate psoriasis accounts for only about 2% of all cases of psoriasis, making it much less common than plaque psoriasis.²

Like the more common plaque psoriasis, the diagnosis of guttate psoriasis is usually made by clinical examination. However, the presence of an elevated anti-streptolysin titer, which indicates a recent streptococcal infection, may support the diagnosis.¹ The exanthem characteristic of this condition includes morphology featuring several erythematous, round, drop-like or “gutta” lesions less than 1 cm (~0.39 in.) and usually found on the trunk and extremities in a centripetal fashion^{3,4} (Figures 1 and 2). Skin biopsy of a lesion may reveal hyperkeratosis, rete ridge elongation, parakeratosis, and collections of neutrophils in the epidermis called Munro’s microabscesses.⁴

There are also genetic factors that may play a role in the pathogenesis of guttate psoriasis.^{1,3} Both guttate psoriasis and the more common plaque variant psoriasis have an association to the PSORS1 genetic locus.⁴ As a result of genetic associations, patients who have an episode of guttate psoriasis have a 40% chance of going on to develop a more chronic form of psoriasis after their first outbreak.³

Interestingly, studies have also found that patients who have shorter resolutions of their rash or test positive for streptococci are less likely to develop a more chronic form of psoriasis.⁵

TREATMENT

There is a paucity of research of guttate psoriasis treatments, making evidenced-based recommendations difficult.^{5,7} Management recommendations are based on evidence of the treatment of other plaque psoriasis.⁶ Topical steroids and phototherapy are both considered first-line options.¹ For mild cases, topical steroids may suffice.¹ With moderate to severe guttate psoriasis, recommended phototherapy options include narrow- or broad-band UVB phototherapy or ultraviolet band A (UVA) phototherapy in conjunction with psoralen (PUVA).^{1,8} One small observational study showed benefit from narrow-band UVB phototherapy in the treatment of guttate psoriasis, but comparisons between different phototherapies and other treatment options are lacking.^{5,9} Vitamin D analogs, salicylic acid, and topical retinoids have also been used, but evidence of effectiveness is lacking.^{1,5,6} Biologics have not been studied for guttate psoriasis and are not currently used unless plaque lesions occur.¹ The few studies that have explored antistreptococcal treatments, including antibiotics or tonsillectomy,

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are of poor quality, precluding their routine use in managing guttate psoriasis associated with group B streptococcal infection.^{6,10}



FIGURE 1:
Guttate psoriasis in a male patient on right arm.



FIGURE 2:
Guttate psoriasis, clinical exam.

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