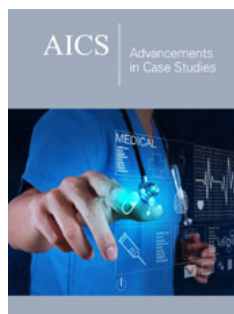


Guttate Psoriasis in Images, A Sign of Streptococcal Tonsillopharyngitis

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Abstract

Guttate psoriasis (GP) is a variant of psoriasis, most common among children and young adults, that often follows streptococcal tonsillopharyngitis. GP is characterized by small, erythematous drop-like papules and plaques on the skin. We describe the case of a 5-year-old boy with concomitant group A Strep (GAS) tonsillopharyngitis and GP. To our knowledge this is the first case report of simultaneous GP and GAS tonsillopharyngitis, not occurring only after the infection. This case shows that, apart from scarlet fever, GP can also be a dermatological manifestation of current GAS. Regarding severe complications associated to untreated GAS infection, non-dermatologist clinicians should also be able to identify typical lesions of GP, that we illustrate, and its presence must trigger clinical suspicion of a streptococcal infection like GAS, allowing early identification and timely antimicrobial therapy.

Keywords: Guttate Psoriasis; Streptococcal Infection; Tonsillopharyngitis

Abbreviations: GP: Guttate Psoriasis; GAS: Group A Strep

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Introduction

The single dermatological manifestation of group A Streptococcal tonsillopharyngitis described in literature is scarlet fever [1]. Also, according to evidence 56 to 97% of first exacerbations of GP are associated to GAS [2] pharyngitis, but it is stated to arise only 3-4 weeks following a GAS infection, often misdiagnosed as a reaction to antibiotics used to treat streptococcus [3]. This manifestation is mediated by streptococci-specific T cells that cross-react against epidermal autoantigens [2]. To our knowledge no case of concomitant GP and GAS tonsillopharyngitis was reported as in this case, only cases of GP after the pharyngeal infection.

Description

A 5-year-old male child, previously healthy, was brought by his mother to the primary care clinic with a pruriginous skin rash of 6 days duration. The rash started as two discrete erythematous plaques on the face and spread as multiple lesions to trunk and limbs. The patient also reported concomitant symptoms of sore throat and malaise, with normal body temperature according to the mother. On examination, he presented pharyngeal/tonsillar hyperemia, low grade fever and multiple drop-like well circumscribed pink erythematous papules with central scale (Figure 1), measuring between 5 to 10mm in size, localized on the face, trunk and extremities, sparing palms, soles and scalp. An oropharyngeal swab was collected and revealed positive on GAS rapid antigen test.



(A)

(B)

Figures 1: A and B: Multiple drop-like well circumscribed salmon pink erythematous papules with a fine scale, consistent with guttate psoriasis on first medical evaluation (day six after eruption).

Our patient started directed treatment to GP with topical association of betamethasone dipropionate 0,05% and salicylic acid 3% twice daily on skin lesions for 1 week, and with 10 days of amoxicillin 50mg/kg/day for GAS tonsillopharyngitis infection. Absence from school was indicated until recovery. On reevaluation

at day 8 of treatment, we observed full remission of symptoms and papules, persisting a residual post inflammatory hypopigmentation on previous lesion location (Figure 2), that gradually returned to normal skin pigmentation over the following 4 months.



(A)

(B)

Figures 2: A and B: Lesions after 1 week of topical treatment and oral antibiotic for GAS pharyngitis. Significant clinical improvement with residual hypopigmentation.

Patient's Perspective

Both patient and mother stated being very satisfied with the outcome and reassured after rapid remission of skin lesions, since the child was being rejected at school stating, "they didn't want to play with me due to my wounds". He no longer suffered other episodes or forms of tonsillitis or psoriasis the following year and social life returned to normal.

Discussion

To non-dermatologist doctors, diagnosing GP can be complex and often mistaken for other infections or a skin reaction to treatment. A typical GP lesion is a drop like well circumscribed millimetric pink erythematous papule, typically with 2 to 15mm, with central scale, and occurs mainly in children and young adults. This condition should trigger clinical suspicion of a streptococcal infection like GAS [3,4]. GAS tonsillopharyngitis infection may have severe cardiac, renal, neurologic and suppurative complications if untreated, like acute rheumatic fever, poststreptococcal glomerulonephritis, pediatric autoimmune neuropsychiatric disorders associated with streptococcus (PANDAS), necrotizing

fasciitis and peritonsillar abscess/cellulitis [1]. Early identification and timely antimicrobial therapy are important to minimize and prevent disease transmission [1] and some complications [5].

Conclusion

This case raises awareness to the fact that typical GP lesions, apart from scarlet fever rash, in a patient with clinical manifestations of GAS tonsillopharyngitis, might also be a precocious sign of the disease, allowing prompt infection investigation and treatment.

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