

Majocchi granuloma in a 58-year-old man with treatment-resistant annular scaling plaque

Simon F. Roy MD, Sandra Davar MD

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A 58-year-old man, living in a rural setting, was referred to our clinic for an indurated, scaling, annular plaque with some central clearing on the dorsum of his left forearm and hand; the plaque had been unremitting for the past year (Figure 1). There was no history of constitutional symptoms, previous immunosuppression, topical corticosteroid use or exposure to household pets. Our patient had interdigital scaling of his toes, suggesting tinea pedis, yet signs of tinea manuum were absent. Our differential diagnosis included dermatophytes, blastomycosis, histoplasmosis, sporotrichosis or *Mycobacterium marinum*. We took scrapings of the plaque for fungal culture and, while awaiting the result, we began a two-week empirical course of topical terbinafine 1% for tinea corporis, which proved ineffective. The culture grew *Trichophyton rubrum*, a common dermatophyte, usually responsive to topical terbinafine. We then performed a skin biopsy, which showed granulomatous inflammation and fungi in the deep dermis, conclusive for Majocchi granuloma, an infrequent deep dermatophytosis.

In contrast to superficial dermatophytoses that remain confined within the epidermis, follicular trauma (for example, from shaving) or local immunosuppression from topical corticosteroid therapy may predispose patients with these dermatophytoses to the development of a deeper infection with granulomatous inflammation. Most commonly, the organism involved is *Trichophyton rubrum*, the same dermatophyte involved in tinea cruris and tinea corporis.¹ Potassium hydroxide scraping of the scales is not a reliable diagnostic measure for Majocchi granuloma; a skin biopsy and fungal culture of the scales must be undertaken.² Although bacterial folliculitis can mimic dermatophytosis, an annular plaque with central clearing is key to suspecting a cutaneous fungal infection.² As the dermatophytosis is deeper than the epidermis in Majocchi granuloma, topical terbinafine cream tends to be ineffective. Our patient's skin condition resolved after a six-week course of oral terbinafine.

References

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2. Collins MA, Lloyed R. Treatment-resistant plaque on the thigh. *Am Fam Physician* 2011;83:753-4.



Figure 1: Clinical photograph of the dorsum of the left forearm of a 58-year-old man, showing an annular plaque composed of scaly erythematous papules at the borders, with mild central clearing. The lesion extended onto the patient's hand, but the interdigital area was spared.

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Affiliations: Departments of Pathology (Roy) and Dermatology (Davar), Centre Hospitalier de L'Université de Montréal, Montréal, Que.

Correspondence to: Sandra Davar, davarsandra@gmail.com