

Fulminant Papulopustular Tinea Corporis Caused by *Trichophyton mentagrophytes*

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Sir,

Tinea corporis classically presents as an erythematous annular plaque with a scaly, centrifugally advancing border. Sometimes, vesicles and pustules are observed. Occasionally, frank bullae appear secondary to severe inflammation (1). Diagnostic difficulties arise when atypical manifestations mimic other diseases, including atopic or seborrheic dermatitis, subacute cutaneous lupus erythematosus or dermatitis herpetiformis. We report a fulminant case of tinea corporis caused by *Trichophyton mentagrophytes* in an immunocompetent man.

CASE REPORT

An 83-year-old man, previously in good medical condition, presented with a 2-day history of rapidly

developing, slightly pruritic skin lesions on his trunk. Past medical history was notable only for prostate cancer, diagnosed in 1991 and treated with surgical resection. There had been no signs of metastasis or cancer recurrence. He denied any animal exposure.

Examination revealed extensive, relatively symmetric erythematous papules and small pustules on the trunk, with accentuation around the breasts and on the upper abdomen (Fig. 1). Some papules coalesced, forming larger plaques in a serpiginous and partially annular configuration. The remainder of a complete skin and nail examination was normal. No systemic signs were present.

Histological examination showed acanthosis with overlying parakeratosis and serum crusts with collections of neutrophils. There was a perivascular and interstitial



Fig. 1. Extensive, symmetrical, partially annular skin lesions on the chest and upper abdomen.

mixed inflammatory infiltrate of lymphocytes, neutrophils and eosinophils. Spores and hyphae were identified on haematoxylin and eosin staining. Periodic acid-Schiff staining confirmed the presence of spores and hyphae. Fungal cultures of skin scrapings were positive for *T. mentagrophytes*.

Additional laboratory data showed a mild anaemia (haemoglobin 8.4 g/dl (normal 8.7–10.9 g/dl)) and eosinophilia ($7 \times 10^3/\mu\text{l}$ (normal $< 5 \times 10^3/\mu\text{l}$)). Inflammatory markers were not significantly elevated (C-reactive protein 5.4 mg/l (normal < 5 mg/l), erythrocyte sedimentation rate 26 mm (normal < 22 mm)). Electrolytes, hepatic, renal and coagulation panels were normal. Antinuclear antibody titres were borderline positive (1:100). Double-stranded DNA antibodies and HIV-1 and -2 serologies were negative.

Based on clinical morphology, the initial differential diagnosis included subacute cutaneous lupus erythematosus, pustular psoriasis and subcorneal pustular dermatosis (Sneddon-Wilkinson disease). Treatment with oral terbinafine 250 mg/day and topical clotrimazole/betamethasone cream twice daily resulted in rapid improvement within 1 week. Systemic therapy was

continued for a total of 4 weeks, until resolution of skin lesions was observed. There was no recurrence of infection at the 6-week follow-up.

DISCUSSION

T. mentagrophytes is one of the most common dermatophytes causing cutaneous human fungal disease worldwide (2). *T. mentagrophytes* is a zoophilic dermatophyte, usually found on rodents, dogs and cats (3). Atypical, disseminated clinical presentations may be seen in immunocompromised patients (4), including those with HIV infection (5). Uncommonly, dermatophyte infections may also demonstrate an atypical pattern or simulate other dermatological diseases in immunocompetent patients (6).

We illustrate an unusually fulminant papulopustular manifestation of *T. mentagrophytes* infection in an elderly patient with a distant history of prostate cancer. Although our patient had no current signs of immunosuppression, an immunocompromised state should be considered and excluded in any patient with a clinically atypical presentation. Cutaneous dermatophyte infections may mimic numerous other dermatological diseases, and it is important to include fungal infection in the differential diagnoses. In this case, histological examination was key in diagnosis, reinforcing our belief that the skin biopsy is instrumental in establishing a definitive diagnosis in difficult cases.

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