INFECTIOUS DISEASES (BACTERIAL, FUNGAL, VIRAL, PARASITIC, INFESTATIONS)

DEEP INFECTION BY TRICHOPHYTON RUBRUM IN A PATIENT WITH DIABETES MELLITUS

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Background: Dermatophytes are common pathogens of superficial infections. In rare cases, a dermatophyte infection may be invasive into the deep dermis, subcutaneous tissue or internal organs. Patients with deep dermatophytosis are usually immunocompromised hosts. We report a rare case of a deep dermatophytosis caused by T. rubrum in a patient with diabetes mellitus.

Observation: A 65-year-old man presented with a 3-month history of well-defined infiltrated erythematous plaque with pustules on his dorsal aspect of the foot. The rest of the skin was not affected. His medical history was positive for diabetes mellitus. The condition was misdiagnosed as eczema and microbial infection. The patient had been treated unsuccessfully with topical corticosteroids and antibiotics. A surgical biopsy performed and a specimen was obtained from the lesion. Histological examination revealed superficial and deep folliculitis, inflammation with multinuclear giant cells and neutrophils at the perifollicular area and PAS stain was negative. Fungal culture of the tissue yielded T.rubrum and confirmed the diagnosis. Antifungal therapy with itraconazole 200 mg daily for one month was successful.

Key message: Dermatophyte infections can mimic other dermatologic diseases such as bacterial infection, eczema and psoriasis. The extent of inflammation depends on the causative pathogen and the immune response of the host. In our case the diabetes mellitus and topical corticoids which have been used contributed to the deep invasion of this infection.