

DERM DILEMMA

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CASE 1



A 36-year-old man presents to your urgent care center with a blistering rash on his left plantar foot. He tells you that peeling in the web spaces of his toes preceded the blisters, which first appeared two weeks ago after he worked out at a local gym. The rash is erythematous with clear, fluid-filled bullae, and you observe white, macerated tissue between the patient's toes. Potassium hydroxide testing of the web spaces and plantar surface of the foot is positive for fungal hyphae.

What is your diagnosis?

CASE 2



A 24-year-old woman is seeking treatment for an inflamed, pruritic, and tender patch on her left jawline and cheek that she first noticed four weeks ago. Applying an over-the-counter topical steroid preparation exacerbated the condition, she says.

Examining the 4-cm plaque, you note that it is crusted and has a sharply marginated outer border. Potassium hydroxide examination is highly positive for fungus, and the site fluoresces green under a Wood's lamp. History-taking reveals that the patient works part-time at the local humane society helping to groom cats and dogs.

What is your diagnosis?

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CASE 1



The patient has bullous tinea pedis, a variant marked by a hypersensitivity reaction to the underlying fungal pathogen (usually *Trichophyton mentagrophytes*). Because the inflammatory component of this variant can cause a false negative result from culture, potassium hydroxide examination is the test of first resort, and it usually will confirm the diagnosis. The medial foot and plantar instep are the most commonly affected sites. Topical antifungal therapy suffices for most patients, but in severe cases a four-week course of terbinafine may be needed. In patients with diabetes, venous insufficiency, or harvested saphenous veins, cellulitis caused by bacterial superinfection is a potential complication.

CASE 2



This is a case of tinea faciei from pet exposure, with a positive fluorescence suggestive of *Microsporum canis*. A superficial fungal infection of the face, tinea faciei can result from both zoophilic and anthrophilic dermatophytes. Animal vectors are cats, dogs, and cattle, while sources of human-to-human infection include children with tinea capitis, athletic competition, and spread from other areas of the patient's own body. These infections often respond to topical antifungal therapy, but four to eight weeks of oral terbinafine therapy may be needed if hair-bearing areas are involved.

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