

Derm Dilemma

Mark A. Bechtel, MD, and Ann Bechtel, BSN, RN



CASE 1

A 32-year-old male farmer presents to the urgent care center with a “skin sore” involving his right arm. The area of involvement developed 3 weeks prior to presentation and has been gradually expanding. He reports pruritus and burning, and notes that his pet dog developed similar “weeping” sores. The lesion appeared to worsen with the application of a topical steroid. Physical examination reveals a 3-cm reddish inflamed plaque, with some peripheral scale and partial central clearing. A scraping of the lesion for analysis with potassium hydroxide is performed and a dermatology consult is ordered

What is your diagnosis?



CASE 2

A 38-year-old woman presents to the urgent care center complaining of a rash involving her feet and ankles, which she notes began several months ago. The rash is painful with burning and minimal pruritus. She reports very small, painful, “punched-out” ulcers that heal with a stellate scar. Physical examination reveals brownish discoloration of the skin, with a background of reticulated erythema and small healing pinpoint ulcerations with white scars. A dermatology consult is ordered for biopsy.

What is your diagnosis?

Dr Bechtel, editor of “Derm Dilemma,” is a professor of medicine and director of the division of dermatology at the Ohio State University College of Medicine in Columbus. He is also a member of the EMERGENCY MEDICINE editorial board. **Ms Bechtel** is a nurse educational consultant in Columbus.

ANSWER



CASE 1

The potassium hydroxide evaluation of the skin scraping is positive for dermatophyte. The patient was diagnosed with tinea corporis, most likely transmitted by his dog. The clinical aspect suggestive of tinea corporis is peripheral scale with central clearing. *Microsporum canis* is the most likely organism, which is zoophilic and often transmitted via canine and feline pet exposure. Animal-to-human fungal infections often manifest as very inflamed, and sometimes “weeping,” sores. Topical antifungals are the treatment of choice for localized uncomplicated tinea corporis; however, oral antifungals should be considered in cases of widespread tinea corporis or for hair-bearing sites.



CASE 2

A skin biopsy confirmed the diagnosis of livedoid vasculopathy, which results from the formation of fibrin thrombi within superficial dermal blood vessels. Although many cases are idiopathic, the condition can be associated with chronic venous hypertension or hypercoagulable states such as Factor V Leiden, antiphospholipid antibodies, and hyperhomocysteinemia. (The patient in this case was later given a diagnosis of Factor V Leiden.) The key to diagnosis is the finding of small “punched-out” ulcers that heal with a white stellate scar. Because treatment is challenging, determining an identifiable cause is important. Anticoagulant, antiplatelet, and various fibrinolytic therapies may be helpful in selected cases.