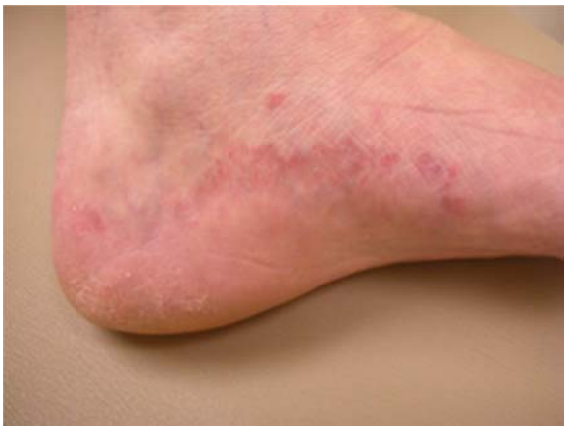
CASE 36-1

A 40-year-old man has a 6-month history of a chronic, asymptomatic rash on his right foot. It has not responded to the use of emollient lotions and 1% hydrocortisone.



What is the best initial step in management of this patient?

(A) Patch testing

(B) Potassium hydroxide (KOH) examination

(C) Trial of a more potent topical corticosteroid

(D) Bacterial culture and empiric oral antibiotics

(E) Punch biopsy

The correct answer is (A), potassium hydroxide (KOH) examination.

The patient in this case has tinea pedis, moccasin type, typified by the well-demarcated erythematous plaque, with fine, white uniform scale on his sole and sides of the foot. A potassium hydroxide (KOH) examination and/or fungal culture should be done to confirm the diagnosis.

Acute allergic contact dermatitis is less likely in this case because the rash is not pruritic. Chronic allergic dermatitis has more of a xerotic, fissured, and lichenified appearance. Even so, patch testing could be considered once dermatophyte infection has been ruled out. A trial of more potent topical corticosteroids could exacerbate a dermatophyte infection and should therefore not be used in this case. There are no clinical features of a bacterial infection, so cultures and oral antibiotics are not indicated. A punch biopsy is usually not needed to diagnose the common dermatoses of the feet.