CASE 28-3

A 30-year-old woman developed a rash after her knee was aspirated for a suspected inflammatory arthritis. The knee had been prepped with povidone-iodine and after the procedure an adhesive bandage was applied. Two days after the procedure, a well-defined erythematous scaly plaque developed on the knee.

What is the one most likely diagnosis?

(A) An allergic contact dermatitis to the povidone-iodine solution

(B) A cellulitis caused by the puncture of the needle

(C) A case of candidiasis from occlusion of the bandage for several days

(D) An allergic contact dermatitis to the adhesive tape

(E) Bacterial folliculitis
The correct answer is (D), an allergic contact dermatitis to the adhesive tape.

This patient has classic allergic contact dermatitis: a bumpy, itchy, pink eczematous dermatitis following the sharp lines of the allergen’s contact. Allergy to povidone would be expected over the entire area of the scrub. There is no dermal edema or erythema to suggest a cellulitis and there are no pustules to suggest a folliculitis. Candidiasis, while possible, would be unlikely under the bandage and is more likely to be found in an intertriginous zone.