A Photo Quiz to Hone Dermatologic Skills

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Case 1:
After 1 month of scratching a worsening inframammary rash, a 68-year-old woman seeks medical evaluation. She has tried over-the-counter hydrocortisone followed by clotrimazole, but to no avail.

Your differential includes which of the following diseases?

A. Intertrigo.
B. Candidiasis.
C. Erythrasma.
D. Contact dermatitis.
E. Dermatophyte infection.

In this setting, the first diagnostic procedure you need to perform is:

F. Fungal culture.
G. Bacterial culture.
H. Patch test.
I. Potassium hydroxide (KOH) evaluation.
J. Wood’s light examination.

(Answer on page 199.)

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Case 2:
A 52-year-old man with diabetes mellitus presents for evaluation of an asymptomatic rash on his right leg. The lesions have been present for 2 months. Which of the following do you suspect?

A. Stasis dermatitis.
B. Lichen planus.
C. Dermatophyte infection.
D. Diabetic dermopathy.
E. Necrobiosis lipoidica diabeticorum.

(Answer on page 199.)

Case 3:
During a general skin examination, a lesion is noted on the chest of a 44-year-old man. The patient was completely unaware of this erythematous, scaly patch and is unable to provide any history.

Your course of action is to:

A. Wait and watch for the next 3 month.
B. Perform a potassium hydroxide examination.
C. Perform a skin biopsy.
D. Prescribe a topical corticosteroid.
E. Try a topical antibiotic for suspected impetigo.

(Answer on page 200.)
**Case 4:**
A 34-year-old woman has been bothered for 1 month by itchy bumps on her elbows and knees.

Which of the dermatoses in your differential is the most likely culprit?

A. Psoriasis.
B. Lichen planus.
C. Granuloma annulare.
D. Dermatitis herpetiformis.
E. Contact dermatitis.

*(Answer on page 200.)*
Case 1: Candidiasis

All of the diseases included in the differential are reasonable possibilities, given the location and appearance of the eruption. A KOH evaluation, I, is the first of the diagnostic procedures to be performed, since it is the easiest and simplest, and yields quick results. Here, the KOH examination confirmed the diagnosis of candidiasis, B.

The patient’s applications of an over-the-counter antifungal preparation probably failed because she did not use the agent for an adequate period. Occasionally, a strain of fungus is resistant to antifungal medications and the infection persists. A 7- to 10-day course of prescription-strength imidazole cream cured the infection.

Case 2: Diabetic dermopathy

Diabetic dermopathy, D, is thought to be a microangiopathic condition that produces asymptomatic, hyperpigmented macules on the shins of persons with diabetes.

Stasis dermatitis is not as discrete and erupts on the lower legs. Lichen planus features purplish plaques. Erythema and scale are characteristic of the less pigmented lesions of dermatophyte infections. Necrobiosis lipoidica diabeticorum plaques are usually atrophic and orangish.
Case 3: Basal cell carcinoma

The friable, asymptomatic lesion raised suspicion of cutaneous malignancy. A skin biopsy, C, confirmed the clinical impression of basal cell carcinoma.

Impetigo and ringworm are usually more symptomatic than the lesion seen here. Application of a topical corticosteroid would temporarily improve the appearance . . . and delay the diagnosis.

Case 4: Granuloma annulare

The suspected diagnosis of granuloma annulare, C, was confirmed by a biopsy. The presence of pruritus in this usually asymptomatic eruption was somewhat misleading, but the lesion’s location—overlying the joints of a female patient—was appropriate.

Psoriasis was ruled out by the appearance of the lesions; psoriatic eruptions are generally larger and more scaly. Lichen planus typically features purplish, flat plaques. Dermatitis herpetiformis lesions usually are masked by excoriations caused by scratching the highly pruritic eruptions of this disease. Contact dermatitis lesions tend to be more scaly and less discrete than those seen here.