A 26-Year-Old Woman with a Rash on Her Extremities
(See pages 1616–7 for the Answer to the Photo Quiz)

Figure 1. Eruption on foot

Figure 2. Eruption on hand

A 26-year-old woman was admitted to the hospital with complaints of fever, headache, skin eruption, and arthralgias 2 weeks in duration. Symptoms began abruptly with chills and fever (temperature to 38.8°C). Three days later, an eruption appeared on the patient’s hands and feet. The eruption consisted of erythematosus to dusky purple papules of 1–2 mm in diameter, with a halo of erythema (figure 1). Many of the papules were nonblanching, and some were papulovesicular. Over the next few days, the original lesions became yellowish, desquamated, and then healed. At the same time, additional new lesions appeared in the same areas. Subsequently, asymmetric migratory arthralgias developed, involving mostly the small joints of the extremities and, to a lesser degree, the knees, elbows, and shoulders.

The patient had some unusual pets, including a python, many rats (which she bred to feed the python), a chihuahua, gecko lizards, siamese cats, ferrets, cockatiels, tarantulas, and a turtle. She denied any recent animal bite. She denied tick or mosquito bites. She had traveled to rural Maine 3 weeks before the onset of symptoms. She did not go into the woods or to the beach and had no exposure to insects or animals during her trip. The findings of a physical examination were remarkable for the skin eruption. There was a soft systolic murmur. There was no lymphadenopathy, arthritis, or neurologic findings. The results of laboratory investigations were normal, except for an elevated erythrocyte sedimentation rate (110), a positive rapid plasma reagin titer (1:1), a positive antinuclear antibody titer (1:320) with homogenous pattern, and
cryoglobulinemia. Skin biopsies of the lesions on the patient’s arms and legs showed leukocytoclastic vasculitis. Her skin eruptions progressed to include pustular lesions (figure 2). Repeat skin biopsies showed the same findings. One bottle from a set of blood culture samples obtained on the day of hospital admission grew gram-negative bacteria (figure 3).

What is your diagnosis?