Answer to Photo Quiz: Multibacillary Borderline Lepromatous Hansen's Disease (Leprosy)

(See page 1 in this issue [doi:10.1128/JCM.05722-11] for photo quiz case presentation)

Figure 1 demonstrates the histopathological appearance of the skin lesion biopsy specimen obtained from our patient's right arm, stained with hematoxylin-phloxine B-saffron, which revealed well-delineated patches of infiltrating eosinophilic epithelioid large cells (histiocytes) forming noncaseating granulomas within the dermis (Fig. 1a and b). Many of the granulomas surrounded small cutaneous nerves (Fig. 1c). The classic finding of perineural thickening with an onion-skin appearance was seen in a view near the deep margin of the dermis upon review by the National Hansen's Disease Program. The modified Ziehl-Neelsen (Wade-Fite) stain demonstrated acid-fast bacilli in the dermal endothelium (Fig. 1d), and occasionally, the organisms aggregated to form structures referred to as globi. Hansen's disease (HD) is caused by *Mycobacterium leprae*. The incubation period is long, usually 3 to 7 years, but may vary between 6 months (in infants) to 40 years (in adults). Worldwide, there are 500,000 to 700,000 new cases diagnosed per year. However, it is a rare diagnosis in the United States, with only 150 new cases reported in 2008 (1). Our patient emigrated from Haiti 3 years prior to symptom onset. According to the Pan-American Health Organization, there were 22 new cases of HD reported in Haiti in 2006, for a detection rate of 0.03 per 10,000 in the population; approximately one-third of these new cases occurred in patients under 15 years of age (www.paho.org). In the United States, only 5.3% of the new HD cases in 2008 occurred in patients under 16 years of age, and only one patient had been born in Haiti (0.67% of total new cases) (1). HD is curable. Therapy consists of long duration of multidrug antimycobacterials which can be obtained from the National Hansen's Disease Program at no cost to the patient. With treatment, patients quickly become noninfectious. In consultation with the National Hansen's Disease Program, our patient began treatment with oral dapsone, rifampin, and clofazimine. Our patient continues to do well after 9 months of therapy.

REFERENCE

1. U.S. Department of Health and Human Services, Health Resources and Services Administration. 2008. National Hansen's Disease Program. A summary of Hansen's disease in the United States. U.S. Department of Health and Human Services, Washington, DC. www.hrsa.gov/hansensdisease/dataandstatistics.html.

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