Hansen Disease (Leprosy)

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A 77-year-old man with psoriatic arthritis, on methotrexate, presented with asymptomatic skin lesions. He denied altered sensation within the lesions and history of international travel, but he reported previously cleaning out suspected armadillo burrows. Physical examination revealed pink, smooth, annular, and cyclic papules and plaques on the extremities and back (Figures 1 and 2). Histopathology showed clusters of acid-fast staining organisms within foamy histiocytes in the dermis (Supplemental Figure, available online at http://www.mayoclinicproceedings.org). Tissue polymerase chain reaction was positive for Mycobacterium leprae, confirming the diagnosis of Hansen disease. Based on clinical and histopathological findings, the patient was classified as having borderline lepromatous disease. Treatment for multibacillary disease with clofazimine, dapsone, and rifampin was initiated for a planned 24-month course, with near resolution of skin lesions after 6 weeks.

Hansen disease, or leprosy, is caused by infection with Mycobacterium leprae, an acid-fast staining, obligate intracellular organism.1 Most cases are seen in India, Brazil, and Indonesia, although the nine-banded armadillo is a zoonotic reservoir for M. leprae in the United States.1,2 Risk factors for infection demonstrated in our case include age above 50, exposure to armadillos, and immunosuppressed status.3,4 Hansen disease classically presents with cutaneous and neurologic findings ranging from solitary or few annular plaques with lesional anesthesia to diffuse macules, papules, and skin infiltration with stocking-glove neuropathy.1 Disease can be categorized along a polar spectrum ranging from tuberculoid to lepromatous disease, using the Ridley and Jopling classification system.1 Treatment is with rifampin and dapsone +/- clofazimine for 6 to 24 months, depending on whether the disease is paucibacillary or multibacillary.5,6

SUPPLEMENTAL ONLINE MATERIAL
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