Images in Clinical Tropical Medicine

Borderline Lepromatous Leprosy in an Italian Man

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We report a 77-year-old man from Italy with a painful, red right eye with decreased vision (Figure 1A) and multiple asymptomatic erythematous infiltrated nodules and edematous plaques on the face (Figure 1B), tongue (Figure 1C), and trunk and extremities (Figure 1D). Lesions appeared on his face 20 years ago and progressively enlarged and diffused on the trunk. Two of his relatives had been affected by lepromatous leprosy. A skin biopsy specimen showed a diffuse infiltrate of vacuolar macrophages engulfed with mycobacteria (Figure 1E) and the focal presence in the

dermis of few multinucleated giant cells and a focal infiltrate of neutrophils.

A polymerase chain reaction identified *Mycobacterium leprae*. Mycobacteria were confirmed by multiple skin smears stained with Ziehl-Neelsen stain. An ophthalmologic consultation diagnosed acute right uveitis. A neurologic consultation disclosed enlargement of both ulnar nerves and sensory and motor impairment in the fourth and fifth fingers. Electro-neurography confirmed involvement of both ulnar nerves, and ultrasound examination demonstrated diffuse swelling of the ulnar nerve at the elbow.

According to the Ridley-Jopling classification, borderline lepromatous leprosy was diagnosed and the patient received rifampicin (600 mg/month), minocycline (100 mg/day) instead of dapsone because of anemia, and clofazimine (300 mg/month and 50 mg/day). The man was treated with prednisone (30 mg/day for 6 months with progressive tapering), thalidomide (200 mg/day for 6 weeks with progressive tapering), and topical prednisolone drops (4 times/day for 4 weeks). Treatment cured concomitant type-1 and type-2 leprosy reactions. At one-year of follow-up, the patient showed no adverse reactions to treatment, remission of skin and mucosal lesions, and improvement of leprosy reactions.

During 1990–2009, progressive reduction of 12 autochthonous leprosy cases (the most recent case in 2003) was observed in Italy with a simultaneous increase of imported leprosy cases among immigrants from leprosy-endemic areas (159 cases).¹ Fear of segregation and marginalization caused the patient to avoid medical treatment for 20 years, resulting in an advanced stage of leprosy. This presentation was unusual because patients are usually given a diagnosis at an earlier stage. Single, anesthetic, hypopigmented, asymmetrically arranged macules and a few macules characterize tuberculoid and borderline tuberculoid leprosy, respectively. Multiple, symmetrically arranged macules, nodules, and plaques characterize borderline lepromatous and early lepromatous leprosy.

Received April 3, 2012. Accepted for publication September 2, 2012.

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FIGURE 1. A 77-year-old man from Italy with borderline lepromatous leprosy. Shown are a red right eye (A) and multiple asymptomatic erythematous edematous infiltrated nodules and plaques on the face (B), tongue (C), and trunk and extremities (D). E, Histopathologic analysis showing vacuolar macrophages (Virchow cells) engulfed with *Mycobacterium leprae* (Fite-Faraco staining, original magnification $\times 1,000$).

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