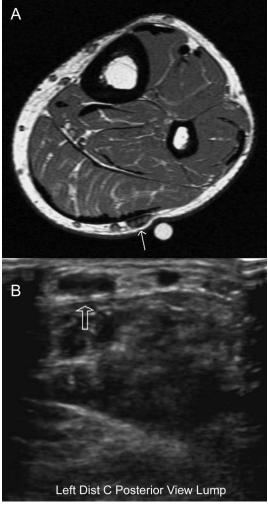
Nontraumatic hypertrophic neuroma in treated Hansen disease

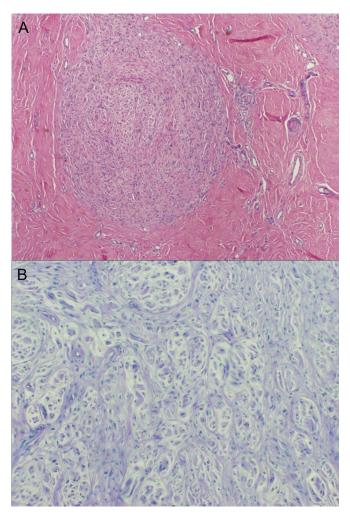
Figure 1 MRI and nerve ultrasound reveal sural nerve enlargement



(A) Left lower extremity MRI (T1 sequence) shows sural nerve enlargement (arrow) with areas of mild enhancement suggestive of active inflammatory changes and decreased signal consistent with scarring. (B) Ultrasound demonstrates focal dilation of the sural nerve measuring $4.0 \text{ mm} \times 8.0 \text{ mm}$ (arrow).

A 42-year-old man with lepromatous leprosy treated with dapsone, rifampin, and clofazimine developed erythema nodosum leprosum (ENL) and neuritis involving facial, posterior tibial, and sural nerves. These reactions were treated successfully with prednisone and thalidomide. Eight years later, he presented with painful paresthesias in the left calf and an enlarged, tender sural nerve. Steroids were ineffective. Nerve ultrasound and MRI revealed focal dilation (figure 1). Nerve biopsy was diagnostic of hypertrophic regenerative neuroma (figure 2); Fite stain and *Mycobacterium leprae* PCR were negative. Nontraumatic neuroma in a patient with treated Hansen disease may clinically mimic neuritis/ENL, perineurioma, or neurofibroma.

Figure 2 Sural nerve biopsy diagnostic of hypertrophic regenerative neuroma



(A) Hematoxylin & eosin shows dense fibrosis surrounding a nodule that has an appearance reminiscent of traumatic neuroma. No granulomas or inflammation are seen (original magnification $40\times$). (B) Luxol fast blue-periodic acid-Schiff stain demonstrates a disordered pattern of regenerating nerves and a paucity of myelinated fibers within the nodule (original magnification $100\times$). Not shown: immunostains for CD45 and CD68 demonstrated small perivascular collections of lymphocytes and macrophages in the epineurium; S-100 immunostain showed small fibers in connective tissue; and epithelial membrane antigen was negative—whorls characteristic of perineurioma were not seen.

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