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# Teaching Neuro *Images*: Neuropathy caused by *Mycobacterium leprae*

A. Mendes, MD P. Abreu, MD

A. Oliveira, MD

L. Castro, MD

S. Carpenter, MD

Address correspondence and reprint requests to Dr. Amélia Mendes, Neurology Department of Hospital de S. João, Alameda Hernâni Monteiro, 4200 Porto, Portugal mendes.amelia@gmail.com

A 52-year-old Brazilian woman presented with numbness and paresthesias in both feet for 6 months. Clinical history revealed nonspecific discomfort in her right foot and recurrent red spots on abdomen and back for 4 years. Examination disclosed cutaneous lesions (figure 1) and EMG showed a chronic, mainly sensory axonal polyneuropathy. Biopsy was diagnostic of leprosy neuropathy (figure 2). After starting multidrug therapy, cutaneous lesions improved and the neuropathy remained stable.

Leprosy, the most treatable form of peripheral neuropathy, must be considered in the differential

diagnosis of neuropathies with cutaneous lesions, especially if sensory fibers are the most involved.<sup>1</sup>

#### **AUTHOR CONTRIBUTIONS**

Dr. Mendes: drafting/revising the manuscript, analysis or interpretation of data. Dr. Abreu: drafting/revising the manuscript, analysis or interpretation of data. Dr. Oliveira: drafting/revising the manuscript. Dr. Castro: drafting/revising the manuscript, analysis or interpretation of data. Dr. Carpenter: drafting/revising the manuscript, analysis or interpretation of data, photography.

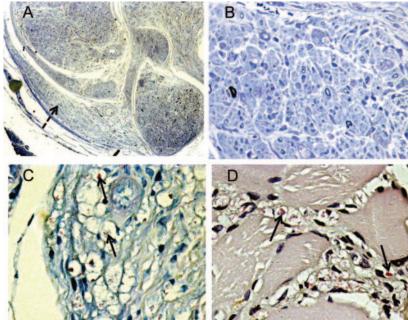
#### **REFERENCE**

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Figure 1 Discoloration of the skin compatible with leprosy cutaneous lesions (arrows)



Figure 2 Toluidine blue (A, B) and Fyte stain (C, D)



(A) Inflammatory cells and fibroblasts have proliferated in the subperineurial space (dashed arrow). (B) Extensive loss of myelinated fibers. (C) Vacuolated cells at the edge of a nerve fascicle contain bacilli (arrows). (D) Muscle showed focal accumulations of bacilli in macrophages (arrows).

From the Neurology Department (A.M., P.A., A.O.) and Pathologic Anatomy Department (L.C., S.C.), Hospital de S. João, Porto; and Faculty of Medicine (A.M., P.A., A.O.), University of Porto, Porto, Portugal.

Disclosure: Dr. Mendes, Dr. Abreu, Dr. Oliveira, and Dr. Castro report no disclosures. Dr. Carpenter has received funding for travel from Fundazione Mariani.



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A. Mendes, P. Abreu, A. Oliveira, et al. *Neurology* 2011;77;e37 DOI 10.1212/WNL.0b013e318228befc

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