



INFECTIOUS DISEASES (BACTERIAL, FUNGAL, VIRAL, PARASITIC, INFESTATIONS)

## DIFFUSE LEPROMATOUS LEPROSY WITH TYPE 2 REACTION TREATED WITH PENTOXIFYLLINE

*Jesus Ancer-arellano<sup>(1)</sup> - Jesus Alberto Cardenas-de La Garza<sup>(1)</sup> - Minerva Gomez-flores<sup>(1)</sup> - Cesar Daniel Villarreal-villarreal<sup>(1)</sup> - Sonia Chavez-alvarez<sup>(1)</sup> - Jorge Ocampo-candiani<sup>(1)</sup> - Oliverio Welsh<sup>(1)</sup>*

*Universidad Autonoma De Nuevo Leon, University Hospital "dr. Jose Eleuterio Gonzalez", Dermatology, Monterrey, Mexico<sup>(1)</sup>*

**Background:** Leprosy is a chronic granulomatous infection caused by *Mycobacterium leprae* and *M. lepromatosis*. The World Health Organization (WHO) has categorized leprosy as a neglected tropical disease. Although its prevalence is decreasing, new cases continue to be diagnosed worldwide. Herein, we present a case of diffuse lepromatous leprosy (LL) with type 2 reaction.

**Observation:** A 48-year-old woman was evaluated for a 5-month history of painful, violaceous-erythematous macules and nodules, affecting trunk, upper and lower extremities. Fever, unintentional weight loss, and myalgias were present. Haematologic tests revealed microcytic anemia and neutrophilia. Histopathology showed multiple dermal and adnexal macrophages, clusters of neutrophils around foamy macrophages. Fite stain revealed clusters of acid-fast bacilli. A PCR was performed rendering positive for *M. leprae*. A diagnosis of LL with type 2 reaction was made. WHO multibacillary regime and pentoxifylline were prescribed with good results.

Leprosy is classified in two polar forms: tuberculoid or lepromatous, and it is further subdivided into indeterminate, borderline-tuberculoid, borderline-borderline and borderline-lepromatous. LL, like the present case, is characterized by erythematous-edematous nodules and macules. Madarosis, xerosis and edema may be present. Type 2 reaction constitutes an immune-complex mediated vasculitis due to bacilli destruction. Cutaneous lesions include painful erythematous-violaceous nodules. Myalgias, arthralgias, and bone pain may be reported. Histopathological examination in LL reveals diffuse or nodular infiltrates of foamy macrophages (Virchow cells). The pentoxifylline was indicated due to the inhibitory effect on TNF- $\alpha$ , which has been implicated in the pathophysiology of type 2 reaction.

**Key message:** Dermatologists and health care providers everywhere should be aware that leprosy may still be present in patients from endemic countries. Prompt recognition and treatment is essential for the elimination of this neglected disease. Pentoxifylline has good clinical outcomes in type II reactions.

