



Internal medicine flashcard

Atypical rash

Juan Carlos Cataño^{a,*}, Diego E. Giraldo^b

^a Infectious Diseases Section, Internal Medicine Department, University of Antioquia School of Medicine, Medellín, Colombia

^b Infectious Diseases Section, Clínica Las Vegas, Medellín, Colombia



ARTICLE INFO

Keywords:

Leprosy

Infectious disease

Hansen's disease

Mycobacterial infections

1. Indication

A 42-year-old hypothyroid woman, who lived her entire life in a rural place of Colombia, used to hunt and eat Armadillo over several years when she was a child, and now presented to the emergency room with 3 months of progressive erythematous/violaceous eruption on her face and both arms, which began on her arms and gradually spread to the face (Panel A). The lesions were not pruritic or hypoesthetic, but also disclosed paresthesias of both feet and hands, associated with 12 Kg weight loss, asthenia, adynamia, fever and osteo-articular pain. On physical examination, she had multiple large, annular, hypopigmented, atrophic macules with well-defined, erythematous, raised borders on her arms (Fig. 1 Panel B). Several skin biopsies were taken on her forehead and arms, demonstrating well-developed epithelioid granulomas with lymphocytes, and Langerhans' cells surrounding neurovascular structures within the papillary dermis.

2. What is the diagnosis?

2.1. Diagnosis

No acid-fast bacilli were detected using modified Ziehl–Neelsen staining on skin biopsies and lymph. On the basis of clinical and histologic findings, the condition was diagnosed as Leprosy (Hansen's disease) of the borderline tuberculoid type, and treatment with daily Dapsone and monthly Rifampin was started following the WHO recommendations for paucibacillary leprosy. Two months later, the patient's neuropathic symptoms had resolved and her rash had faded substantially (Fig. 1 Panel C and D).

Leprosy is a chronic, infectious disease caused by *Mycobacterium leprae*. It mainly affects the peripheral nervous system, skin, and certain other tissues such as the reticulo-endothelial system, bones and joints, mucous membranes, eyes, testes, muscles, and adrenals [1]. Leprosy

* Corresponding author at: Calle 15 Sur # 48-130, Medellín, Colombia.

E-mail address: kataju@hotmail.com (J.C. Cataño).

<https://doi.org/10.1016/j.ejim.2018.12.006>

Received 1 October 2018; Accepted 19 December 2018

Available online 26 December 2018

0953-6205/ © 2018 European Federation of Internal Medicine. Published by Elsevier B.V. All rights reserved.



Fig. 1. Panel A, B and C: Multiple large, annular, hypopigmented, atrophic macules with well-defined, erythematous/violaceous raised borders on her hands, arms and face. Panel D: Clinical improvement after treatment with Dapsone.

clinical presentation varies from few to widespread lesions. Cutaneous and peripheral nerve trunks are frequently invaded by *M. leprae*, the consequences of this invasion will depend on the affected nerves, individual immunological response, type of leprosy and reactions [2]. Nerve damage is usually characterized by impairment or complete sensory loss in the areas related to the peripheral nerves [3].

Patient consent

Obtained.

Conflict of interests

The authors report no conflict of interesting regarding this work.

Funding information

This paper received no specific funding.

References

- [1] Reibel F, Cambau E, Aubry A. Update on the epidemiology, diagnosis, and treatment of leprosy. *Med Mal Infect* 2015 Sep;45(9):383–93.
- [2] Talhari C, Talhari S, Penna GO. Clinical aspects of leprosy. *Clin Dermatol* 2015 Jan-Feb;33(1):26–37.
- [3] White C, Franco-Paredes C. Leprosy in the 21st century. *Clin Microbiol Rev* 2015 Jan;28(1):80–94.