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Rhinitis leprosary

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INTRODUCTION

Leprosy is a chronic, granulomatous infection disease caused by Mycobacterium leprae.

There are approximately 25 million people in the world who have leprosy (Younger, 1982). Of these, 96% are found on the Asian and African continents. Spain comes second among the European countries with regard to the number of patients with leprosy and 600 of these patients live in Cataluna. 26% of the patients are illiterate which emphasizes the social problem that underlies the disease.

There are several clinical forms of the disease and the type of leprosy which an individual develops depends upon his innate resistance to the causative organism (Barton, 1976). The official definition of the two types and two groups of leprosy were developed at the Sixth International Congress on Leprosy in Madrid in 1953 (Arnold, 1973).

Lepromatous leprosy (LL) is the progressive form of the disease in which cutaneous symptoms predominate over the nervous symptoms and the mucous membranes, such as eyes, bones, testes and kidneys may be simultaneously affected. Cutaneous lesions in LL range from macules to papules, plaques or modules called lepsomas. In LL the nasal mucosa is affected in approximately 95% of the patients (Barton, 1976) and this involvement occurs early in the progression of the disease. The purpose of this paper is to describe a patient with leprosy who complained of symptoms in the rhinologic area.

CASE REPORT

A 57 year-old woman was seen by us in October 1977 for the first time. The patient had a purulent rhinitis in the left nasal fossa. Both physical and radiological examinations were consistent with a left maxillary sinusitis which improved after treatment with ampicillin. Four months later the patient noted unilateral nasal obstruction with sanguineous rhinorrhea.

An O.R.L. examination showed lesions with crustae in the left nasal fossa with spontaneous bleeding. Nasopharyngoscopy failed to show any lesion. Because of hemorrhagic rhinorrhea and unilaterally occurrence of the symptoms, a biopsy was suggested. However, the patient's consent was not obtained. Four years later,

she came back to our Department. The clinical symptoms had increased and she also reported painless, burn-like lesions in her hands. On examination crusted lesions were found in the anterior portion of the septum and in the left inferior turbinate, together with unilateral purulent rhinorrhea. From these findings Mycobacterium leprae was identified. The patient was sent to the Department of Dermatology for evaluation of the cutaneous lesions.

The patient's medical history was revised and she explained that she had had paresthesias in the lower extremities during several years back and also the amputation of the second right toe a year before. The dermatologic examination revealed erythematous, cold, painless modules in trunk, superior extremities and face. These lesions appeared eight months ago. Both hypothenar eminences were atrophic with multiples old ulcers in her palms (Figure 1). On her right sole she had malum perforans (Figure 2). Neurological examination showed a total anaesthesia in the ulnar, radial, median and ciatico pepliteo externo areas. A skin biopsy from a cutaneous module on the forearm showed an extensive inflammatory infiltrate involving both the papillary and the reticullary dermis. This infiltrate consisted of abundant macrophages with foamy cytoplasm forming well defined modules (Figure 3). The Ziehlstain revealed numerous acid-fast lepra bacilli (Figure 4).

DISCUSSION

In 1976, Barton reviewed the nasal involvement in lepromatous leprosy and described the clinical phases. The earliest intranasal change specifically recognizable as leprosy is a pale, often yellowish thickening of the mucous membrane. Abnormal dryness of the nasal mucosa may be seen in very early cases. In the intermediate phase of the nose becomes blocked and crust formations are predominant. In this phase, the secretions of the nose are more interesting and the discharge is most of the time frequently mucopurulent and may by blood stained. In this phase the destructive lesions are remarkable features. The supporting cartilaginous and bony skeleton can be destroyed. The differential diagnosis of these late changes include nasal granulomatous diseases such as nasal tuberculosis (Waldman, 1981); Wegener's granulomatosis (McDonald, 1983); nasal sarcoidosis (Maillard, 1978) and syphilis.

CONCLUSIONS

Lepromatous leprosy is a rare phenomenon in the otorhinolaryngologic practice. We have discussed a case history in which the rhinologist was able to make the diagnosis in spite of several dermatologic symptoms.

The definitive diagnosis must ultimately be based on the isolation of the M.Leprae in the nasal smears and the occurrence of histologic changes.

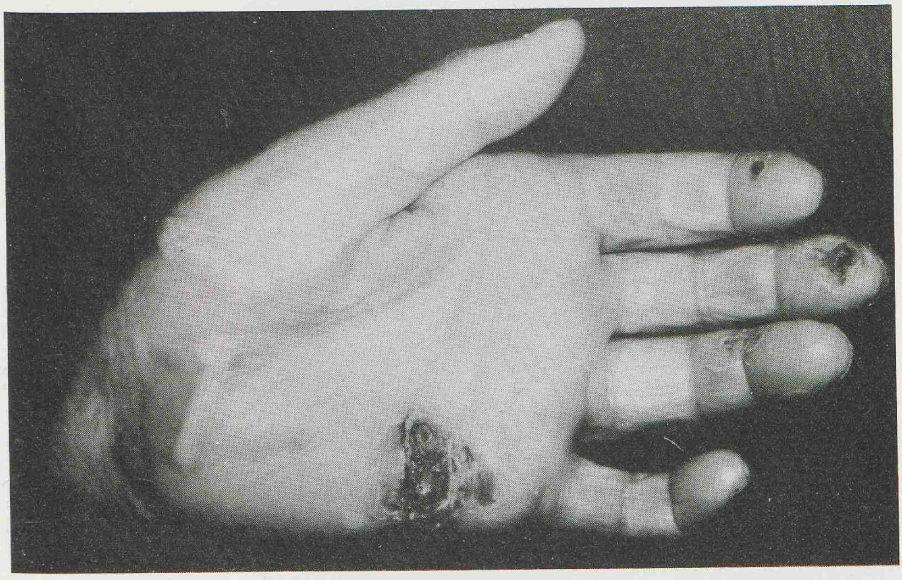

Figure 1. Atrophic and ulcerated lesions in the left hand.

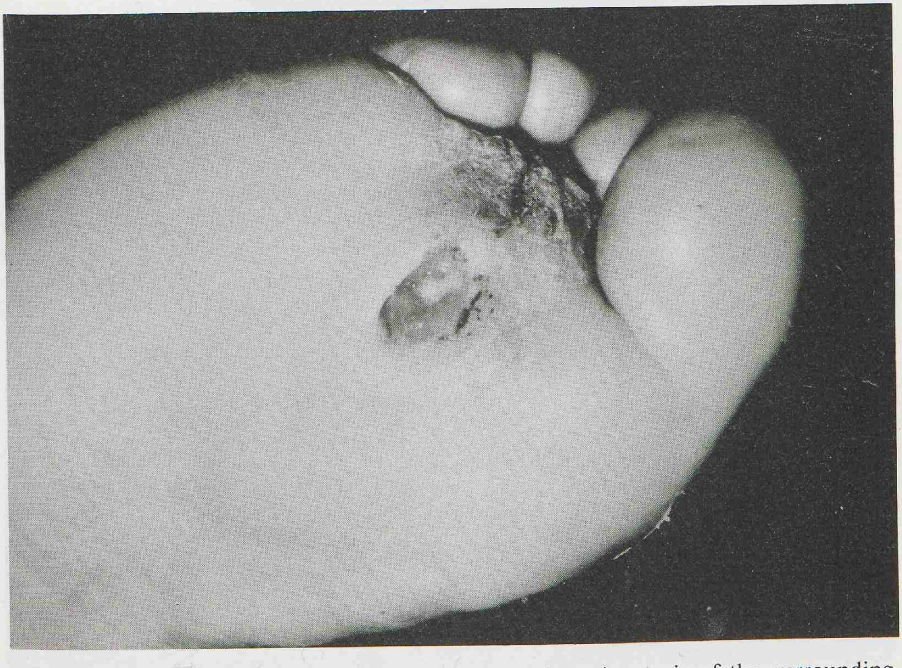

Figure 2. A painless, indolent plantar ulcer with hyperkeratosis of the surrounding skinon right sole of the patient.

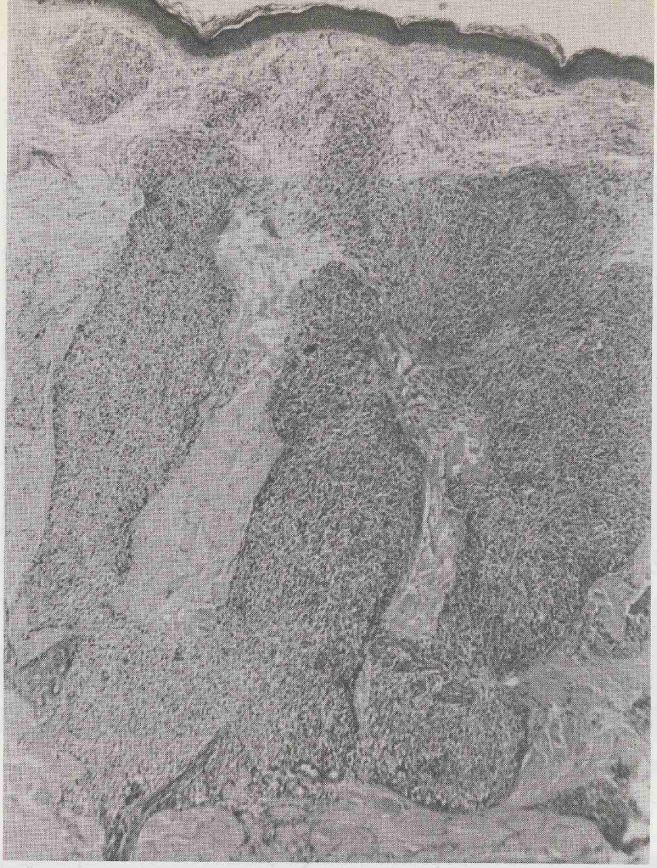

Figure 3. Multiple well defined nodules in the dermis. (HE × 40)

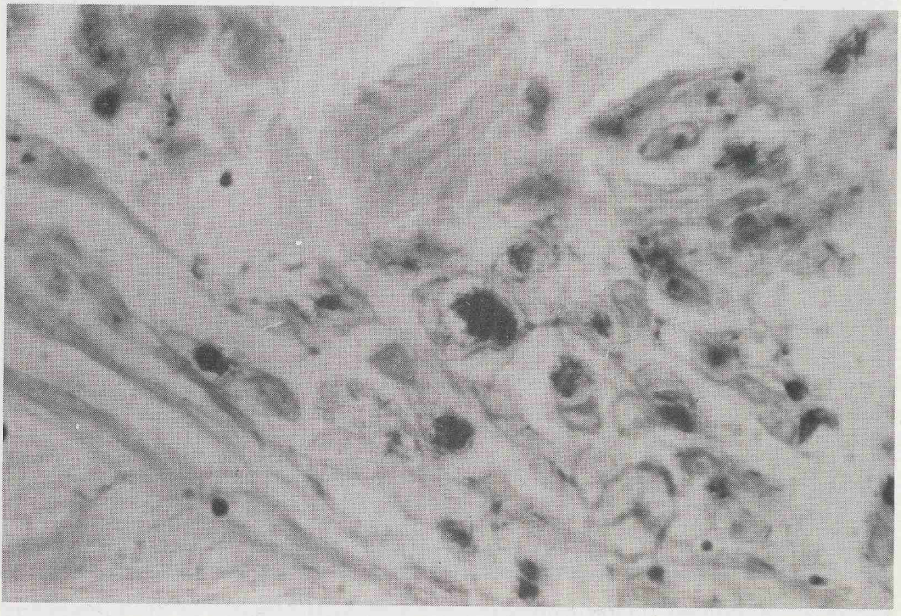

Figure 4. Typical globi of lepromatous leprosy with the Ziehlstain. (HE × 1000).

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