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Case Report

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Lepromatous leprosy masquerading as rhinophyma

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ABSTRACT

Leprosy a major global health problem, especially in the developing world, is an infectious disease caused by *Mycobacterium leprae*. Leprosy has a predilection to with cooler areas of the body. Lepromatous leprosy presents with varied manifestations like nodules, cervical lymphadenitis, hyperpigmented patches and other presentations which can mimic various other diseases and pose a diagnostic challenge in endemic areas. We report a case presenting with nodular infiltration of the nose mimicking rhinophyma who presented with faint reddish swelling over the nose which progressed to nodular infiltration. There was bilateral symmetrical thickening of nerves following which diagnosis was confirmed by slit skin smear and the patient was started on multibacillary multidrug therapy. The importance of rightly diagnosing cases presenting as nodules that mimic rhinophyma is important because of the infectious nature of the disease which pose a threat to the community.

Keywords: Lepromatous leprosy, Rhinophyma

INTRODUCTION

Leprosy is a dermato-neurological chronic infection caused by *Mycobacterium leprae*, an acid-fast intracellular bacillus.[1] Leprosy has a predilection for cooler and trauma prone areas of the body.[2] Ear and nasal septum are well recognised regions to be involved in leprosy owing to their cool temperature. Factors responsible for predilection of bacilli in these areas are because of their high ratio of surface area to tissue volume and distinctive pattern of vasculature as developed neonatally.[3]

Lepromatous leprosy presenting as nodules over the nose can mimic rhinophyma. Rhinophyma is a condition affecting external nose due to hypertrophy of the sebaceous tissue not & inflammation of the tissue around the gland over the skin. Several tuberous conditions of the nose such as tuberculosis, syphilis, and leprosy are likely to be confused with rhinophyma.[4] Lepromatous leprosy can present with varied manifestations like hyperpigmented patches, involvement of palms and soles, asymptomatic swelling over neck misdiagnosed as cervical lymphadenitis, granuloma annulare, erythema multiforme-like presentation, myositis, lymphadenopathy and so on.[2,5-7] We report a case of lepromatous leprosy presenting as nodules over the nose mimicking rhinophyma.

CASE REPORT

A 42-year-old man presented with history of asymptomatic skin lesions over nose since 6 months. The lesions over the nose initially began as a faint reddish swelling which over a period of time evolved to form nodules. He consulted his family physician who referred for dermatological opinion.

On cutaneous examination there were multiple confluent erythematous nodules affecting bulb of the nose and ala nasi resembling rhinophyma. Few nodules were also seen on surrounding area of upper lip, malar area, helix and

antihelix of external ear. On closer examination multiple faint erythematous macules were seen over trunk and proximal extremities. On peripheral nerve examination bilateral symmetrical thickening of greater auricular and ulnar nerve was present. On collaborating clinical features, a final diagnosis of lepromatous leprosy was done. Diagnosis was confirmed by slit skin smear for *Mycobacterium leprae* from multiple sites with average bacteriological index of 5+. Patient was started on multibacillary multi drug therapy (MB-MDT) consisting of rifampicin, clofazamine and dapsone.

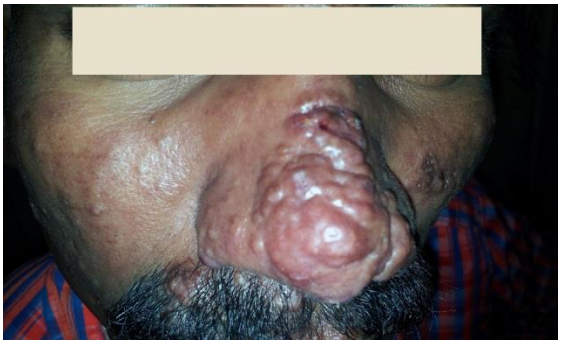

Figure 1: Multiple erythematous papules and confluent nodules present over bulb and ala nasi.

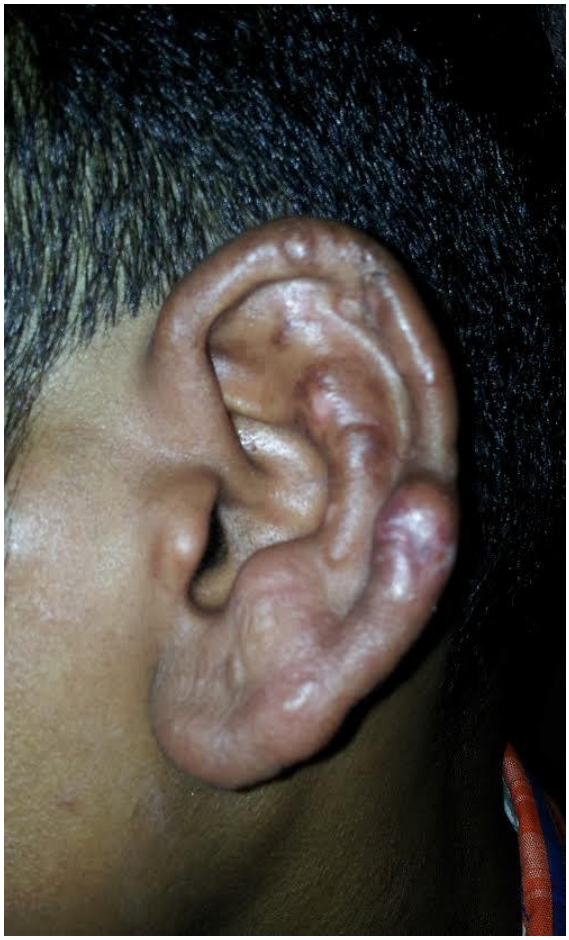

Figure 2: Ear shows infiltration with papules and nodules over helix and antihelix.

DISCUSSION

Leprosy in India though declared to be eliminated; still incidence of lepromatous leprosy cases are reported in low prevalence areas. Family physicians and residents may miss or misdiagnose a case of leprosy because of lack of awareness and clinical exposure. Atypical presentations are also not uncommon. Hence it is very crucial that otorhinolaryngologists are aware of such presentations of leprosy. This is because the presentation as in our case is indicative of a highly infective form of leprosy which contributes significantly towards the spread of disease in community and maintaining the prevalence of the disease. About 95% of lepromatous leprosy patients will have an early involvement of the nose; early recognition and diagnosis of lepromatous cases limit the more florid form and deformity.[8] Our case resembled rhinophyma because of nodular infiltration of the nose thus creating a diagnostic challenge. Nose manifestations in Lepromatous leprosy can be early, intermediate and late ones. Early changes are infiltration of mucosa and drying. In the intermediate manifestation, nasal obstruction and nasal crusts are seen. In the late manifestation, there is development of an ulcer, secondary infection, perforation of the cartilaginous nasal septum and anosmia. Nose can become saddle-shaped if nasal septum is destroyed.[9]

Thus nodules affecting the nose mimicking like rhinophyma should always be carefully examined as they can present as a disease process in conditions including leprosy, sarcoidosis, cutaneous malignancy (basal cell, squamous cell or sebaceous carcinoma), angiosarcoma, and nasal lymphoma.[10] In suspected cases, histopathology or other relevant investigations will help and exclude other causes.

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