Case Report

A case of advanced lepromatous leprosy with rhino-oro-laryngological involvement in the post-elimination era

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A patient presenting with symptoms and signs of congestive heart failure was incidentally found to be in advanced stage of leprosy. He had multiple lepromatous nodules over the entire body. The oral mucosa was yellowish with a matte appearance and the palate had a site ready to perforate. Nasal cavity revealed a small septal perforation with overlying crusts suggesting advanced rhinitis. Diagnosis of lepromatous leprosy was confirmed on histology. This case report emphasizes the existence of pockets of highly bacilliferous cases that continue to be a source of infection within the community and highlights the need for enhanced health education.

Key words : Lepromatous leprosy, Oral mucosa, Perforation, Elimination

Introduction

Leprosy still is a public health problem. Rhino-oro-laryngological involvement is a late manifestation of leprosy and represents widespread involvement. This case report discusses the clinical features of the rhino-oro-laryngological manifestations of leprosy and highlights the fact that highly baciliferrous cases still exist in some areas.

Case Report

A 42-year-old man presented to the outpatient department with congestive cardiac failure. He was incidentally found to have infiltration of the face and earlobes, madarosis, macrochelia and gynaecothelia. On cutaneous examination, multiple skin colored papulo-nodular infiltrations were seen distributed over the entire body predominantly on the extremities. Examination of the nerves revealed bilateral non-tender enlargement of the ulnar, lateral popliteal and radial cutaneous nerves. Examination of the oral cavity revealed multiple nodular lesions on the hard and soft palate, tongue and the uvula. Oral mucosa was yellowish with a matte appearance; an impending perforation on the palate was observed (Figure 1). Teeth and gingiva were normal. The nasal cavity revealed a small septal perforation with overlying crusts suggesting advanced leprous rhinitis.

Skin smears showed a bacterial index of 4.5+ (selective sites: 6+ from a nodule on the upper limb), morphological index was 0. A Skin biopsy from a nodule on the elbow showed epidermal atrophy and foamy macrophages containing many solid staining AFB in clusters (Figure 2).

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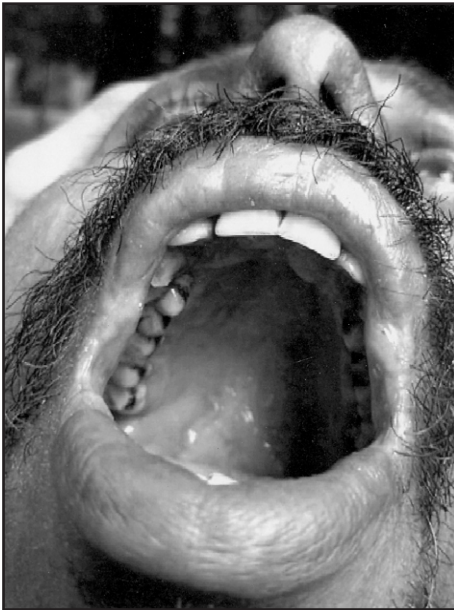

Figure 1 : Oral mucosal involvement with an impending palatal perforation

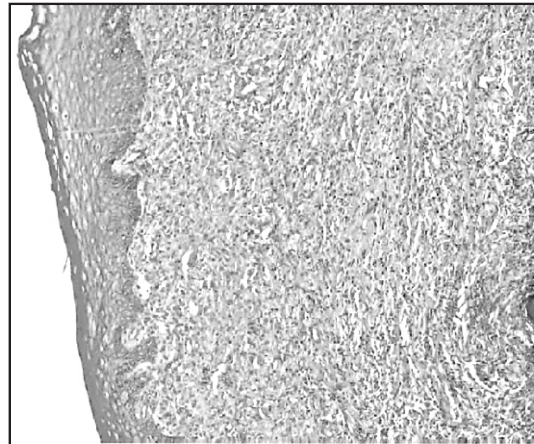

Figure 2 : Clumps of bacilli seen on histopathological examination of skin

Treatment with drugs for heart failure, WHO MB MDT and liquid paraffin lavage for the nose was given.

On contact screening his wife was diagnosed to have borderline tuberculoid leprosy and was treated with PB MDT.

Discussion

The patient presented to the out patient department with symptoms of cardiac failure, unaware of symptoms of leprosy despite the presence of such florid manifestations. Leprous oro-nasal involvement is a late manifestation of the disease. Oral manifestations of leprosy include papulo-nodular lesions and perforation involving the hard and soft palate (Kumar et al 1988). Diffuse infiltration and erosions may lead to scarring and deformity leading to dysphonia. Uvula, pharynx, tonsillar pillars and tongue may also be similarly involved (Bhat et al 2007). Nasal involvement may manifest as mucosal thickening, ulcers, crusts and septal perforation (Barton et al 1974).

The existence of cases with such florid disease is evidence of the fact that there is a need for increased awareness, training of the clinicians in other specialties and enhanced health education. Examination of contacts is important.

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References

1. Barton RP (1974). A clinical study of the nose in leprosy. *Lepr Rev*. **45**:135-144.
2. Bhat R, Sharma VK and Deka RC (2007). Oto-rhino-laryngological manifestations of leprosy. *Int J Dermatol*. **46**:600-606.
3. Kumar B, Yande R, Kaur I et al (1988). Involvement of the palate and cheek in leprosy. *Indian J Lepr*. **60**: 280-284.