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## RESEARCH ARTICLE

# NASAL LEPROMATOUS LEPROSY WITH LEONINE FACIES – AN UNUSUAL PRESENTATION OF HANSEN'S DISEASE

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### ABSTRACT

Leprosy, an infectious chronic granulomatous disease is caused by microorganism, Mycobacterium leprae which is an acid fast bacilli. In Lepromatous leprosy, cutaneous symptoms are more common than nervous symptoms. Eyes, bones, testes, nose and kidneys may be simultaneously affected. The nasal mucosa is affected in almost 95% of the patients. Macules, papules, plaques or modules are the cutaneous lesions in Lepromatous leprosy. Leprosy affects all age groups with no sex predilection. We are reporting a case of lepromatous leprosy with predominant nasal symptoms and nodular lesions over pinna.

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## INTRODUCTION

Lepromatous leprosy is a progressive form of the disease caused by Mycobacterium leprae. It is highly contagious with long incubation period. The mycobacteria has a liking for peripheral tissue and survives at a temperature near 30 degrees. Hence its affinity for skin, peripheral nerves and mucosa of upper airways. Usually they present with numb hypopigmented patches and localized paraesthesia. Lepromatous rhinitis, saddle nose, involvement of maxilla, loss of teeth and hair loss may be seen. Diagnosis is based on clinical suspicion and confirmed on histopathological analysis from nasal biopsy or slit skin smear. Here we present a case of 26 year old male whose symptoms are mainly chronic nasal obstruction and purulent foul smelling discharge.

## CASE REPORT

A 26 Year old patient, manual labourer by profession presented to ENT OPD with chief complaints of nasal obstruction, foul smelling nasal discharge and cutaneous nodular lesions over bilateral pinnae since 4 months. Patient also complained of occasional epistaxis since 1 month. Patient had no other ENT symptoms.

There was no history of contacts with any patient with TB or leprosy in the family or elsewhere. On physical examination, he had leonine like facies with few papulo – nodular lesions over forehead, ear and cheeks and loss of lateral one third eyebrow and eye lashes. He had spade like hands and feet, saddle nose and pendulous ear lobes. On examination of EAR, multiple cutaneous nodules were noticed over helix and antihelix in both ears and also malar area. There was no local rise of temperature and tenderness. On examination of nose, external examination appeared normal. On Anterior Rhinoscopy, polypoidal changes observed over the lateral wall of the nose. Crusting, secretions and blood clots were present in the anterior portion of the septum and around the area of middle turbinate. Patient was then planned for nasal endoscopy and consent was taken. DNE revealed nodular lesions over the entire nasal mucosa in particular the middle turbinate. Crusting was present over the lateral wall which when removed bled a little. A biopsy was taken from the middle turbinate and sent for histopathological examination. Histopathology complimented by Fite ferraco stain revealed multiple acid fast bacilli consistent with lepromatous leprosy. Patient was also referred to the department of dermatology. Multiple nodules were present over trunk and extremities.

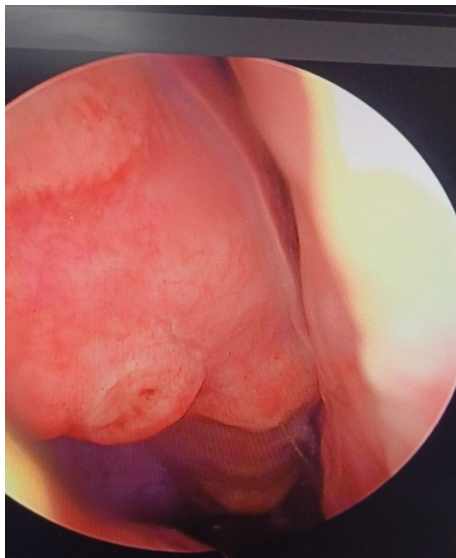


Figure 1. Dne showing nodular lesion over middle turbinate



Figure 2 . 3 , 4. “Leonine facies “loss of lateral half eyebrow, nodular lesions over helix

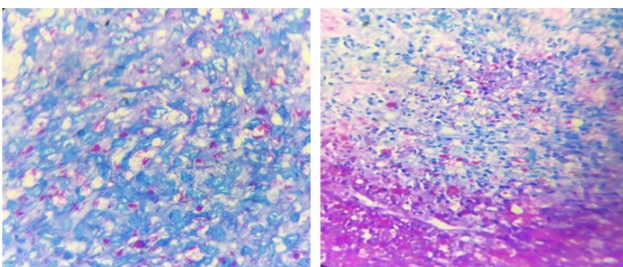


Figure 5. 6. Multiple acid fast bacilli consistent with lepromatous leprosy

## DISCUSSION

Leprosy is a chronic granulomatous infectious disease, slowly progressive caused by *Mycobacterium leprae*. It is highly infective with long incubation period. Lepromatous leprosy is the more contagious form with involvement of skin and peripheral nerves along with nasal symptoms. Nasal involvement is common in lepromatous leprosy. The nose is an important route of entry for the bacilli into the body and the initial site of Hansens’s lesions. Nose manifestations in leprosy can be early, intermediate and late. Pale, yellowish thickening of the nasal mucous membrane, abnormal dryness of the nasal mucosa may be seen in early cases. Crusting and nasal obstruction becomes predominant in intermediate stage. In late stages supporting osteo -cartilaginous framework may be destroyed, can lead to saddle nose. Lepromatous rhinitis may be complicated by secondary pyogenic infections and may spread to maxilla. Further it may cause maxillary bone erosion, saddle nose and palatal perforation<sup>1</sup>.. Martin et al found that the nasal lesions persist and may progress during or after treatment<sup>2</sup>. Hence early diagnosis can limit the disease progression and facial deformity The peripheral nerves are usually affected in lepromatous leprosy. Nerve involvement with peripheral nerve thickening are observed. Neurological disturbances are manifested by nerve infiltration and thickening with neuritis, paraesthesia and trophic ulcers. Multiple papules and macules are seen often symmetrically distributed over forehead, cheek, trunk and extremities. In addition to macules, lepromatous skin lesions may be nodules or plaques, or they may diffusely infiltrate the skin, especially on the face ( may cause loss of eyebrows and eye lashes and “ leonine facies “ ). Differential diagnosis may include nasal tuberculosis, wegeners granulomatosis, nasal sarcoidosis. Diagnosis is mainly clinical suspicion followed by nasal biopsy or slit skin smear and acid fast staining. On histopathological examination using special stain fite ferraco showed multiple acid fast bacilli which are consistent with diagnosis of lepromatous leprosy. Intervention at an early stage will avoid serious deformities caused by the disease.<sup>3</sup> Treatment of Leprosy should be as conservative as possible<sup>4</sup>. Current treatment of leprosy involves use of three drugs, rifampicin, clofazamine and dapsone over a period of 12 to 24 months<sup>5</sup>.

## CONCLUSION

Leprosy still remains a major public health hazard. New cases are still being reported though in India it has been declared to be eliminated. Around 95% of patients with lepromatous leprosy have nasal symptoms and an ENT specialist should always keep this in mind while examining patients with chronic nasal symptoms.

## REFERENCES

1. Silva GM, Patocinio LG, Patocinio JA, Goulart IM. 2008. Otorhinolaryngologic evaluation of leprosy patients protocol of a national reference centre. *Intl Arch otorhinolaryngol*.:12 (1) 77 – 81.
2. Martins AC, Castro Jde C, Moreira JS. 2005. A ten year historic study of paranasal cavity endoscopy in patients with leprosy. *Braz J Otorhinolaryngol Sept / Oct*:71(5):609 – 15.
3. Ramos – E – silva M, Rebello PF. 2001. Leprosy. recognition and treatment. *AM J Clin Dermatol*.2(4):203-11.
4. Kim JS, Kwon SH, Shin JY. 2015. Leproma presenting as a nasal cavity mass. *J Craniofac Surg.*, Nov ;26(8):e694 – 5.
5. Barton, RP. 1974. A clinical study of the nose in lepromatous leprosy. *Lepr Rev.*, 45:135–44Google ScholarPubMed

Non tender thickened peripheral nerves were present bilaterally. Slit skin smear from a cutaneous nodule was highly positive ( 5+). The patient was started on multibacillary multidrug therapy consisting of rifampicin, clofazamine and dapsone for 12 months. He is still on follow up and doing well.

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