

Case Report

PRIMARY TUBERCULOSIS OF TONSIL AND POSTERIOR OROPHARYNGEAL WALL

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Summary: Pharyngeal tuberculosis is rare and usually occurs in association with primary pulmonary disease. Primary tuberculosis involving the palatine tonsils and the posterior oropharyngeal wall is still a rare clinical entity. We report one such case of primary tuberculosis involving both the palatine tonsils and the posterior oropharyngeal wall in a 22 year-old male. The patient responded to anti-tubercular treatment with complete disappearance of lesion and no sign of recurrence on one year follow-up. The final diagnosis was based upon histopathological report. [*Indian J Tuberc* 2008; 55:48-50]

Key Words: Tuberculosis, Oropharynx

INTRODUCTION

Tuberculosis of oral cavity is uncommon and pharyngeal lesions are extremely rare. Pharyngeal tuberculosis is usually secondary to pulmonary disease¹. This report presents an unusual case of primary oropharyngeal tuberculosis. The purpose of this report was to point out that a high index of suspicion should be kept in mind to reach the diagnosis in patients presenting with sore throat, fever and malaise.

CASE REPORT

A 22 year-old male presented with history of sore throat, odynophagia, occasional fever, malaise for one year duration. He had been taking treatment in form of various courses of antibiotics, analgesics, antihistaminics since then without any relief. He had no previous history of any serious illness, chronic cough, other chest symptoms or Human Immunodeficiency Virus (HIV) exposure.

While the general physical examination revealed normal findings, oral examination showed enlarged tonsils and multiple ulcerated areas over the surface. The posterior pharyngeal wall showed granular hypertrophic areas (Fig. 1). There was no

cervical lymphadenopathy. Routine hematological evaluation revealed a raised Erythrocyte Sedimentation Rate (ESR) of 50mm in first hour. Mantoux test was positive. Chest radiography was normal. Throat swab and sputum for acid fast bacilli were negative. With a high index of clinical suspicion of tuberculosis, biopsy was taken from ulcerated



Fig.1: Tonsilar enlargement with multiple ulceration and granular hypertrophic areas on posterior pharyngeal wall

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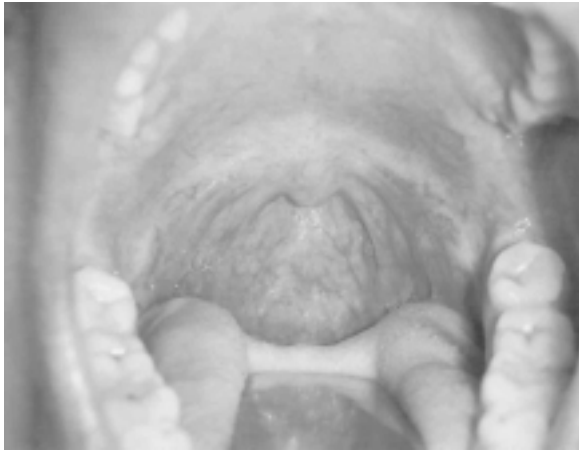


Fig. 2: Recovery after 6 months of anti-tubercular treatment

area of both tonsils and granular area of the posterior pharyngeal wall and sent for histopathological examination. Histology revealed granulomatous dense sub-mucosal lymphoid infiltrate with multiple epithelioid histiocyte granulomas, including multinucleate giant cells and caseous necrosis consistent with the diagnosis of tuberculosis (Fig. 3). Serological tests for Acquired Immunodeficiency Syndrome (AIDS) and syphilis were negative. Patient was managed with anti-tubercular treatment in standard doses for six months. The patient had a good symptomatic response within the first month

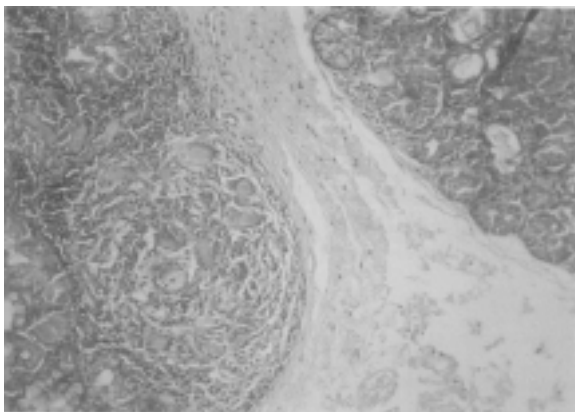


Fig. 3: Granulomatous dense submucosal lymphoid infiltrate with multiple epithelioid histiocytes, multinucleate giant cells and caseous necrosis. (H & E stain; 10X)

of treatment with total disappearance of ulcers and granular areas after completion of treatment (Fig. 2). On one year follow-up, there had been no evidence of recurrence.

DISCUSSION

Tuberculosis of upper respiratory tract is rare and is usually secondary to pulmonary disease¹. Primary tuberculosis affecting palatine tonsils and posterior oropharyngeal wall is still extremely rare². Present case is unique in its presentation as lesions were present both in the palatine tonsils and posterior oropharyngeal wall concomitantly. Available literature does not reveal simultaneous involvement of both sites in the same patient.

The upper respiratory tract is generally resistant to tuberculosis. Saliva by virtue of its cleansing action is thought to have an inhibitory effect on tubercle bacilli³. It is also postulated that presence of saprophytes, the antagonism of striated musculature to bacterial invasion and thickness of the protective epithelial covering of the oropharyngeal mucosa have an inhibitory effect on tubercle bacilli⁴.

Isolated pharyngeal lesions affecting the nasopharynx, palatine tonsil or posterior oropharyngeal wall are acquired by inhalation with harbouring of disease in Waldeyer's ring⁵. Extra-pulmonary localizations of tuberculosis are rare, commonly encountered in patients with poor host reaction due to chronic alcoholism, HIV infection, etc.⁶ Our patient neither had any chronic illness nor was immuno-compromised.

Pre-disposing factors for primary oral tuberculosis include poor oro-dental hygiene, dental extractions, periodontitis and leucoplakia^{1,3}. The present case did not have any such predisposing factors.

Differential diagnosis of oral and pharyngeal tuberculosis includes traumatic ulcer, aphthous ulcer, Plaut-Vincent's tonsillitis, haematological disorders, actinomycosis, syphilis, midline granulomas, Wegener's disease, carcinoma and lymphoma^{6,7}. Diagnosis, however, is based on high index of clinical

suspicion, histopathological findings and the identification of tubercle bacilli.

A case with a history of long standing sore throat with clinical evidence of ulceration over tonsils and granular appearance of posterior oropharyngeal wall, should alert the clinician to the possibility of tuberculosis as a causative factor, especially in developing countries and in regions where the incidence of tuberculosis is high.

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