Secondary pharyngeal tuberculosis

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Abstract

Secondary tuberculosis of pharynx is a rare condition as pharynx is not a common site for clinically manifest tuberculosis. A rare and unusual case of secondary oropharyngeal tuberculosis in a 40 years male patient, who presented with an ulceroproliferative lesion of oropharynx extending to nasopharynx and laryngopharynx is being reported.

Keywords Tuberculosis · Anti tubercular therapy

Introduction

Tuberculosis is regarded as the single most common communicable disease worldwide [1]. After the introduction of anti-tuberculosis therapy and immunization, the incidence of tuberculous infection has decreased. The upper respiratory tract is no longer a common site for tuberculous infections. The Acquired Immuno-Deficiency Syndrome (AIDS) epidemic and the emergence of mycobacterial strains with multiple drug resistance has resulted in the worldwide upsurge in the incidence of tuberculous infection [2]. This led the World Health Organization to declare a global tuberculosis emergency [3]. Secondary tuberculosis of pharynx though a rare entity, is seen only in massive sputum positive patients usually with cavitating pulmonary tuberculosis. The pharyngeal lesions are secondary to coughing up heavily infected sputum and consist of very painful shallow ulcer in pharynx and oral cavity. Occasionally the pharynx is involved in patients with wide spread miliary tuberculosis and here lesions may be due to blood born or sputum born dissemination of disease.

Case report

A 40-year-old male presented with pain throat and cough with expectoration of 3 month duration. There was history of loss of weight and appetite with non-contributory past, personal and family history. On examination, there was ulcero-proliferative lesion of oropharynx extending to nasopharynx and laryngopharynx. The lesion bled on touch (Fig. 1). There was no cervical lymphadenopathy.

The complete haemogram and urine examination were within normal range except the erythrocyte sedimentation rate which was 62mm in first hour. Serum electrolytes, Kidney Function test and Liver Function test were also within normal limits. The chest radiographs showed bilateral consolidations with infiltrative lesions involving upper and

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Fig. 1 Ulceroproliferative lesion of oropharynx

Fig. 2 The chest radiograph showed bilateral consolidation with infiltrative lesions involving upper & mid-zones

Fig. 3 Epithelioid cells, langhans type of foreign body giant cells and lymphocytic infiltration into subepithelial tissue suggestive of tubercular lesion

mid zones (Fig. 2). Soft Tissue Neck radiography showed a normal prevertebral space and airways.

Sputum for Acid Fast bacilli was negative. Mantoux test was strongly positive. Biopsy was taken from posterior pharyngeal wall and sent for histopathological examination which revealed granulomatous inflammation showing epithelioid cells, Langhans' type of Foreign body Giant cells and lymphocytic infiltration into subepithelial tissue suggestive of tubercular lesion (Fig. 3). Patient was put on anti-tubercular therapy as recommended by World Health Organisation to which patient responded well.

Anti tuberculosis regimen:

Isoniazid 300 mg daily Rifampicin 600 mg daily Pyrazinamide 1500 mg daily Ethambutol 1200 mg daily	}	for two months followed by	Isoniazid 300 mg daily Rifampicin 600 mg daily	}	For four months
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Discussion

Secondary tuberculosis of pharynx is a quite rare condition, it is said to be present as an ulcerated, lipoid lesion or as granuloma. It is secondary to tuberculosis else where usually pulmonary and may be associated with cervical lymphadenopathy [4].

Mycobacterium tuberculosis cannot invade the intact mucosa of oral cavity or pharynx. Usually the micro-organisms need a disruption of oral mucosa to become pathogenic. Even saliva has inhibitory effect on tubercle bacilli [5] but organisms can invade through the breaches in the mucosa due to chronic irritation or inflammation. Poor dental hygiene, leukoplakia and dental extraction are other predisposing factors [6]. Trenis (1940) [7] reported two cases of nasopharyngeal tuberculosis which were sputum positive for Acid Fast bacilli. Mair Jonannessen (1970) [8] described a patient with nasopharyngeal tuberculosis who had history of pulmonary tuberculosis and tubercular spondylitis and Raizada et al (1984) [9] reported one case of primary nasopharyngeal tuberculosis and cervical Lymphadenopathy but no pulmonary lesion. Mehta et al (1996) [10] reported a case of primary posterior oropharyngeal wall tuberculosis.

Pharynx is not a common site for clinically manifest tuberculosis. Secondary tuberculosis is usually seen in nasopharynx of sputum positive patient, as probably the sputum tends to stay in contact with nasopharynx for a longer time. This case is unusual as there was extensive ulceroproliferative lesion involving oropharynx, nasopharynx and laryngopharynx.

Tuberculous lesion of pharynx are of three forms:

1. Acute miliary tuberculosis;
2. Chronic ulcerating tuberculosis;
3. Lupus Vulgaris.

Acute miliary tuberculosis

It is rare complication and always secondary to pulmonary tuberculosis. It spread through blood. It is an acute disease and always associated with general symptoms of tuberculosis. On tonsil very minute pearly grey tubercles or yellowish spots are seen as in tonsillitis. There can be increased salivation, anorexia, wasting and fever.

Chronic ulcerating tuberculosis

It is always associated with advanced pulmonary tuberculosis. There is shallow ulcer in the pharynx with undermined edges. There is severe pain as nerve ending are intact and exposed.

Lupusvulgaris

It usually occurs in 10 to 20% of patients with lupus of skin.

Our case fits in criteria of chronic ulcerating tuberculosis. Nowadays tuberculosis of pharynx is very rare condition; however, if a patient presents with ulcerating lesion of pharynx and not responding to antibiotics, then tuberculosis should be suspected.

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