# **Base of Tongue Tuberculosis: A Case Report**

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**Abstract-** We report a rare case of base of tongue tuberculosis following pulmonary tuberculosis. Patient presented to us with chief complaints of sore throat and pain on swallowing for period of 3 months. On examination with 70 degree telescope, we observed an ulcer on right side of base of tongue. The edges of the ulcer appeared to be undermined with whitish slough at the centre of the ulcer. Examination of neck showed a multiple small palpable middle deep cervical lymph nodes on right side of neck. Biopsy of the ulcer was taken, which showed granulomatous inflammation, suggestive of tuberculosis. Laboratory investigations revealed a raise in erythrocyte sedimentation rate, sputum for acid fast bacilli was strongly positive. Chest X ray was performed for patient showed multiple areas of consolidation. Patient was referred to chest clinic for further management of tuberculosis and was started on anti-tuberculous drugs. In conclusion tuberculosis of oral cavity is rare, but should be considered among one of the differential diagnosis of the oral lesions and biopsy is necessary to confirm the diagnosis.

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**Keywords:** Base of tongue tuberculosis; Pulmonary tuberculosis; Oral ulcer

### Introduction

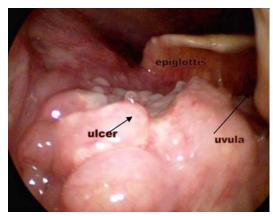
Tuberculosis can involve any organ system in the body and tuberculosis of oral cavity is very rare. It can occur as primary infection without involving other organs or can occurs as secondary infection following pulmonary tuberculosis. The main presenting symptom is painful oral ulcer (1). We present a rare case of base of tongue tuberculosis following pulmonary tuberculosis.

## Case Report

A 55 years old Malay man presented in the outpatient department of otorhinolaryngology PPUM with main complain of sore throat and pain on swallowing for period of 3 months. Patient also complains of cough, low grade intermittent fever, headache and night sweats. There was no loss of weight or hemoptysis but patient complain of loss of appetite. There was no history of contact with tuberculosis patient.

Patient comes from low socioeconomic status and is a chronic smoker 24 packs/years. He had a history of left sided pneumothorax for which chest tube was inserted 18 years ago, and he was started on anti tuberculosis drugs for 3 months of period, but patient defaulted follow up.

On oral examination revealed poor oral hygiene, and on examination with 70 degree telescope of base of tongue showed an ulcer about 1.5 cm on right side of base of tongue. The edges of the ulcer appeared to be undermined with whitish slough at the centre of the ulcer (Figure 1).



**Figure 1**. Endoscopic view of oral cavity showing an ulcer at base of tongue



Figure 2. Chest X ray PA view showing areas of consolidation

Biopsy of the ulcer was taken, which showed granulomatous inflammation, suggestive of tuberculosis. Other examination of oral cavity and larynx was normal. Examination of neck showed a multiple small palpable middle deep cervical lymph nodes on right side of neck.

Laboratory investigations revealed a raise in ESR (erythrocyte sedimentation rate), sputum for acid fast bacilli was strongly positive. Other biochemical investigations were within normal limits. HIV test was negative. Chest X ray was performed for patient showed multiple areas of consolidation (Figure 2).

Patient was referred to chest clinic for further management of tuberculosis and was started on antituberculous drugs (DOTS- directly observed treatment, short-course).

#### Discussion

Tuberculosis of oral cavity is very rare. Oral Tuberculous lesions may occur on tongue, gingival, floor of mouth, palates, lips and buccal mucosa (2). The most common site is lateral border of tongue (3).

Oral tuberculosis can occur as primary infection without involving other organs or can occurs as secondary infection (4). Secondary lesions are more common, occurs following pulmonary tuberculosis from infected sputum or hematogenous seeding (5). In this particular case it was secondary lesion following pulmonary tuberculosis. The oral ulcer is usually formed by breakdown of tubercles and may have undermined edges with a granulating floor. Oral Ulcers may be indurated and is often painful (3,6). Clinical presentation of extra pulmonary tuberculosis is atypical. The most

common symptoms of lingual tuberculosis are pain on deglutition, burning sensation and otalgia (1).

The constitutional symptoms of extra pulmonary tuberculosis are fever, anorexia, weight loss, malaise and fatigue. Lymph nodes are the most common sites of extra-pulmonary tuberculosis followed by pleural effusion. Lymph node tuberculosis may occur at time of primary infection or due to re-infection or reactivation (7). The diagnosis of oral cavity tuberculosis is based on sputum culture by presence of acid fast bacilli, chest Xray and biopsy. Histopathological findings are suggestive of granulomatous infection.

The differential diagnosis of a tuberculous ulcer of the oral cavity includes aphthous ulcers, traumatic ulcers, syphilitic ulcers, actinomycosis, Wegener granuloma, and malignancy (2,8). Treatment of tuberculosis in our centre is by antituberculous therapy, DOTS regime. In conclusion tuberculosis of oral cavity is rare, but should be considered among one of the differential diagnosis of the oral lesions. Biopsy is necessary to exclude any underlying malignancy.

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