

Primary lingual tuberculosis: a case report

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Abstract

Tuberculosis is very common in India and Southeast Asia, where the prevalence rate is about four per 1000 population and the incidence rate of the disease is two per cent. Fifteen per cent of the tuberculous population of the world reside in India. Both secondary and primary tuberculous lesions of the tongue and oral cavity are rare. We report a 60-year-old male with the seventh case of primary lingual tuberculosis.

Key words: Tuberculosis; Tongue

Case report

A 60-year-old male residing in the rural community attended ENT out-patients department. He complained of a dull aching pain in the tongue, increasing on swallowing, radiating to the right ear for four months and had developed an ulcer of the tongue for two months. There was no history of cough, fever or weight loss and his appetite was normal. The patient had been a tobacco chewer for eight years except for the last four months.

On examination, his pulse, temperature and general condition was normal. Medically there were no signs nor symptoms of pulmonary or gastrointestinal tuberculosis. Local examination revealed an ulcer of about 2 × 2 cm in size present over the ventral surface of the tongue near the tip of the left side. The ulcer was covered with a white slough with overhanging edges. The base was soft. No cervical mass or lymph node was palpable.

Laboratory investigations revealed 10.5 per cent haemoglobin, 4,800 total leucocytic count, 58 per cent polymorphonuclear leucocytes, 39 per cent lymphocytes and three per cent eosinophils. The erythrocyte sedimentation rate was 6 mm hour. Biochemical levels were within normal limits. The VDRL and HIV tests were negative. Chest radiograph showed no abnormality or signs suggestive of old pulmonary tuberculous lesion. Bronchial lavage was negative for acid fast bacilli and other abnormal organism on smear and culture. The provisional diagnosis was 'chronic nonhealing ulcer' and malignancy was not ruled out. A punch biopsy from the margins of the ulcer under local anaesthesia was inconclusive. A wide wedge excision of the ulcer was performed under general anaesthesia. Histopathological examination showed an atrophic and ulcerated epithelium covering several caseating granulomas surrounded by lymphocytes, epithelial cells and Langhans's type giant cells in the subepithelial and muscular layers. There was no evidence of any neoplastic change.

On completion of a six-months course of antituberculous treatment and during follow-up there was no recurrence of disease.

Discussion

In India the prevalence of pulmonary tuberculosis is four per 1000. A total of nine million active cases are present in India, which forms 15 per cent of the total tuberculous population of the world. About 25 per cent of the cases are sputum positive (Chandra, 1995; Sr. Placida and Fr. Jose El 1996; Park, 1994). Lingual tuberculosis associated with pulmonary tuberculosis has been common, but primary lingual tuberculosis without pulmonary tuberculosis is rare.

Bowen Davis (1971) described three forms of oral tuberculosis; acute milliary, chronic ulcerative and lupus vulgaris. The chronic ulcerating type is always secondary to advanced pulmonary tuberculosis and involves the tongue near the tip. The ulcers are shallow with undermined margins and painful due to intact nerve endings. Atypical tuberculous lesions e.g., diffuse glossitis, fissures or tuberculoma have been reported (Bhadarkar *et al.*, 1993), multiple ulceration (Jawad, 1996). According to Farber *et al.* (1940) only 0.1 per cent of cases develop an oral tuberculous lesion, while Katz (1941) at autopsy of 141 cases of known pulmonary tuberculosis found that 20 per cent had an oral tuberculous lesion. On reviewing the literature only six cases of primary tuberculosis of the tongue have been reported in the last 30 years (Gupta *et al.*, 1965; Kakker and Sood, 1971; Hashimoto and Tanioka, 1989; Verma *et al.*, 1989; Bhandarkar *et al.*, 1993; Jawad, 1996) four of which were from India.

The mechanism of entry of the bacilli into the tongue is not clearly understood. The tuberculous ulcer closely resembles a malignant and/or traumatic ulcer, and should arouse suspicion in an elderly person not responding to treatment. Usual treatment of the tuberculous ulcer is by antituberculous drugs or surgical excision followed by antituberculous drugs.

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