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Primary lingual tuberculosis: a case report

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Abstract
A case of primary tuberculosis of the tongue in a 45-year-old male patient is presented. The clinical manifestation, diagnosis and the response to the antituberculosis treatment are considered. The previous literature is reviewed.

Key words: Tongue; Tuberculosis

Introduction

Since the introduction of effective chemotherapy, tuberculous lesions of the oral cavity are rare (Tyldesley, 1978; Waldman, 1982). We report a case of typical primary lingual tuberculosis.

Case report

A 45-year-old man presented with a two-month history of progressive painful swelling of left side of the tongue. During that period he had lost eight kg of his body weight due to severe odonophagia. There was no history of cough, night sweating nor pyrexia. He had been treated for glossitis and tongue ulceration with systemic antibiotics and local medications with no improvement.

Clinically, he looked severely distressed and spoke with difficulty due to the painful movements of the tongue. Examination revealed generalized tender swelling of the anterior left two-thirds of the tongue, a deep fissure on the

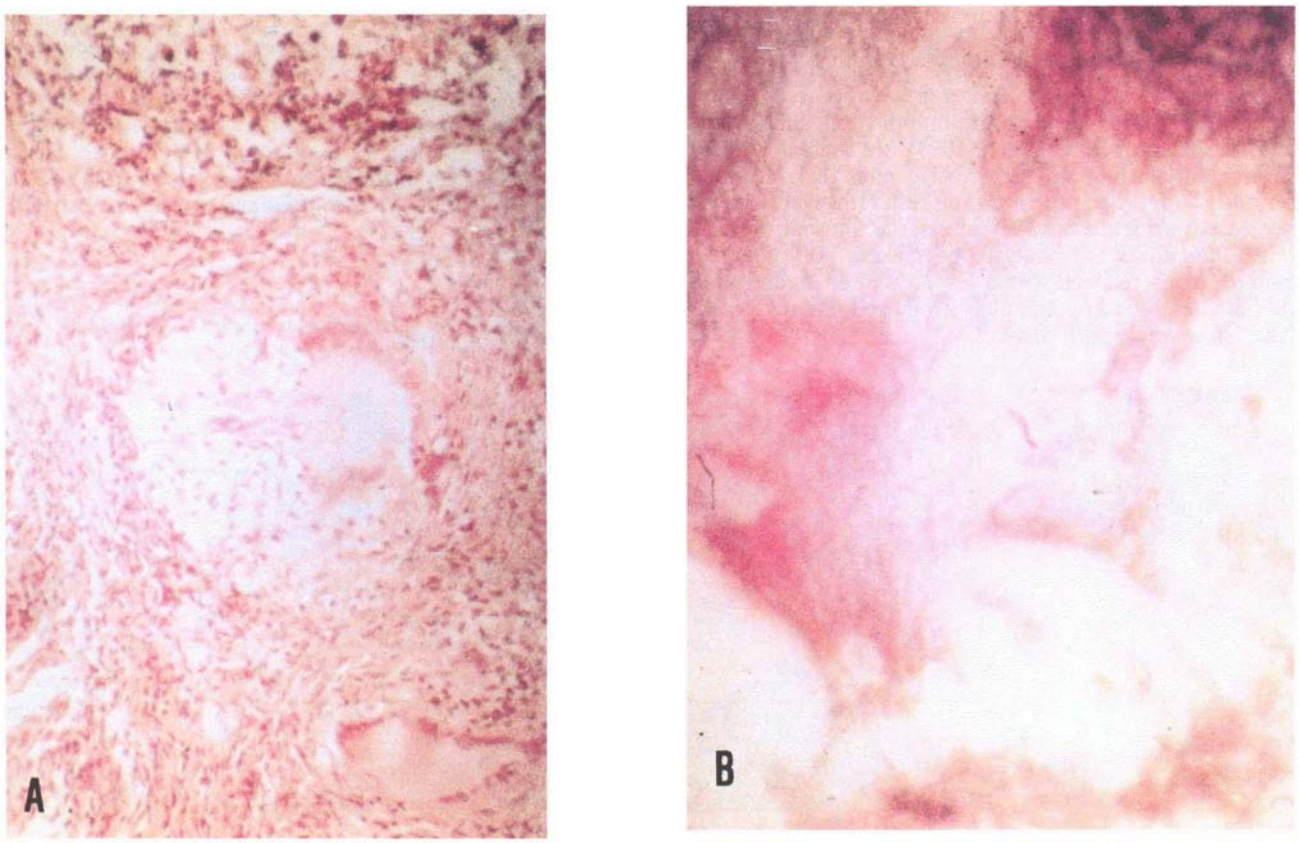

FIG. 1
Lingual tuberculosis A. Caseating granuloma (H & E × 100) B. *Mycobacterium tuberculosis* inside a giant cell (Ziehl Neelsen × 1000).

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left lateral margin, and multiple ulcerations involving the left ventral and lateral surfaces ranging from a few mm to 1 cm in diameter. There was no cervical lymph node enlargement. The general systematic examination was unremarkable.

Chest radiography showed no evidence of active pulmonary lesion. The haematological studies showed; haemoglobin 12.8 gm/dl, WBC count 4.7 $\times$ 10^9/l, polymorphs 46 per cent, lymphocytes 48 per cent and ESR 68 mm/h (Westergren). Serological studies for HIV antibodies and VDRL were both non-reactive. Repeated direct examination of sputum and culture for acid-fast bacilli were negative. Also, bronchoscopy and bronchial lavage for acid-fast and fungal studies were negative.

A biopsy, under general anaesthesia, of the margin and centre of the ulcer was performed. The histopathological examination revealed granulomatous inflammation with areas of caseation necrosis. The granulomas were composed of epithelioid cells and Langhans' giant cells. The section stained by the Ziehl-Neelson method revealed a few acid-fast bacilli (Figure 1).

A week after commencing the antituberculous therapy the pain disappeared. The tongue ulcerations completely healed within a few weeks.

Discussion

Oral tuberculous lesion may be either primary or secondary, although there are atypical cases reported in the literature. The tongue is the most common oral site of involvement (Waldman, 1982), where the tuberculous lesion may manifest itself as an ulcer, a fissure, a tuberculoma or a diffuse glossitis (Bhandarkar *et al.*, 1993). A survey of the literature of the last 35 years revealed only five cases of primary tuberculosis of the tongue (Gupta *et al.*, 1965; Kakkar and Sood, 1971; Hashimoto and Tanioka, 1989; Verma *et al.*, 1989; Bhandarkar *et al.*, 1993). The case we report presented with all the above local manifestations. Oral tuberculous lesions, as described by Lynch (1984), are characterized by severe, unremitting and progressive pain that interferes seriously with proper nutrition and rest. However, with the decreased incidence of tuberculosis, the unusual forms of oral tuberculosis are likely to be missed. Although, the pain is greatly reduced within few days after the introduction of chemotherapy, the ulcerations and fissures usually take a few weeks to resolve.

Conclusion

This rare condition should be considered in the differential diagnosis of patients with painful non-healing tongue lesions, who are not responding to usual treatment.

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