CASE REPORT

Lingual Tuberculosis Clinically Resembling as a Neoplasm - A Case Report

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Abstract:

Lingual tuberculosis is a very rare case in the areas where tuberculosis is endemic. There are diagnostic difficulties in patients presenting with non healing ulcer over the tongue due to variety of clinical appearances, most of which may clinically resemble malignant lingual neoplasm. Here we report a case of lingual non healing ulcer in a 40 years male which was clinically diagnosed as malignant ulcer but histopathology and ZN staining confirmed the diagnosis of lingual tuberculosis.

Key words: - Lingual tuberculosis, non-healing ulcer.

Introduction:

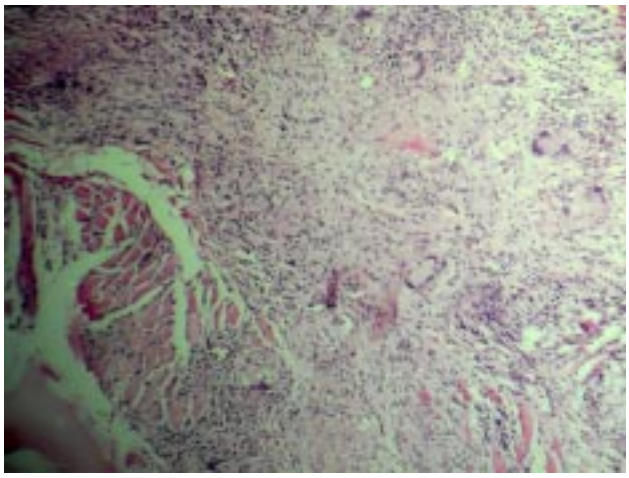
Lingual tuberculosis whether primary or secondary is very rare [1]. Most of the reported cases in the literature are cases of secondary tuberculosis, in association with pulmonary lesion or primary focus elsewhere [1]. The clinical diagnosis of primary lingual tuberculosis is very difficult in cases of non-healing ulcer over tongue. The diagnosis is made by histopathological examination. We report a case of lingual tuberculosis in a 40 years male worker.

Case report:

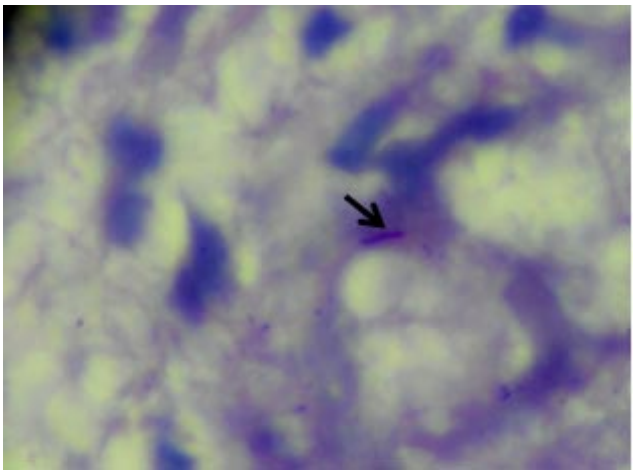
A 40 years male worker from low socio economic group presented with a non healing ulcer of 3x2x1mm over anterior two third of the dorsum of tongue. The ulcer had undermined edges and hemorrhagic base. There was no history of cough, fever, dyspnea but there was a history of loss of appetite. There was no history of hemoptysis or contact with a case of tuberculosis. Patient was a non smoker. On clinical examination there was no focus of tuberculosis in the vicinity of tongue like cervical lymph nodes, tonsils and lungs. Chest X-ray, ultrasonography of abdomen together with laboratory tests including complete blood count, coagulation profile, blood urea, electrolytes as well as renal and liver function tests were reported to be within normal limits. Serological tests for HBV, HCV, HIV and syphilis were negative. With this history, clinical findings and routine investigations, initial clinical diagnosis of malignant ulcer over tongue was made. For confirmation of clinical diagnosis deep punch biopsy was sent for histopathological examination. The serial sections revealed granuloma consisting of caseous necrosis, epithelioid cells, Langhans' type of giant cells and lymphocytes (Fig. 1). Zeil & Nelson stain was done, which confirmed the presence of acid fast bacilli (Fig. 2). A final histopathological diagnosis of lingual tuberculosis was made. The patient was started on antituberculous therapy and follow up showed good response.

Discussion:

In developing countries like India, tuberculosis is one of the causes of suffering and death.



Photomicrograph 1 – Tuberculous Granuloma with Muscle Tissue of Tongue (Low Power View H & E Stain)



Photomicrograph 2 – Z-N Staining showing Acid Fast Bacillus (Oil Emersion View)

The World Health Organization (WHO) estimates that 2 billion people or 1/3rd of world's population are infected with tuberculous bacilli [2]. Tuberculosis can affect every organ or tissue in the body. However, the most commonly involved organ is the lung but tuberculosis of tongue is rarely described entity with a rate of occurrence of 0.1% [3-5]. Most cases of oral tuberculosis are mainly secondary to pulmonary tuberculosis and rarely primary in origin [1, 6]. Primary tuberculosis of oral cavity including tongue is very rare because of continuous cleaning of oral mucosa by saliva and absence of lymphoid follicles in tongue [7, 8].

The most common presenting symptoms of lingual tuberculosis are pain on deglutition followed by burning sensation and otalgia [9]. Morphologically lingual tuberculosis can be present as painful shallow tuberculous ulcer, tuberculoma, tubercular fissure, tubercular papilloma and tubercular cold abscess [10-12]. The ulcer in tuberculosis is usually formed by breakdown of tubercles [12]. The common sites of lingual tuberculous ulcers are on the tip, lateral borders, dorsum and base [13]. They are irregular with undermined edges, pale and indolent with granular thin slough in the floor, as in this studied case.

The differential diagnosis of indurated tongue ulcers includes oral malignancies (squamous cell carcinoma) lymphoma, salivary gland tumor and metastatic deposits. Other non-neoplastic differentials are traumatic ulcerations, apthous ulcers and certain infections such as primary syphilis, histoplasmosis etc. Other histological differential diagnosis includes granulomatous conditions such as sarcoidosis, Crohn's disease, deep mycosis and tertiary syphilis. A detailed clinical history and tissue biopsy remains the gold standard for confirmation of diagnosis.

Lingual non-healing ulcer clinically may resemble malignant ulcer but the possibility of lingual tuberculosis should be ruled out as with early diagnosis and treatment patient is benefitted. Surgery is not required in cases of lingual tuberculosis and prognosis is favourable after anti-tuberculous chemotherapy.

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