Case Report

A rare case report of primary tuberculosis of tongue

Manoj Kumar Sharma[1*], Narayani Joshi[2], M. L. Yadav[3], Tashi Agarwal[1]

[1]Resident, [2]Professor and Head, [3]Professor
Department of Pathology, Mahatma Gandhi Medical College and Hospital, Jaipur, Rajasthan, India
[*]Corresponding author email: **manojsharma.kmc@gmail.com**

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Abstract

Tuberculosis is an infectious disease that has displayed increasing incidence in the last decades. In the ENT area, the most common onset is cervical lymphadenitis, which accounts for 95% of ENT cases. The posterior pharyngeal wall, tonsillar pillars, sidewalls, soft palate, and tongue are the least probable locations. A 40 year old male presented in the ENT OPD with a growth at base of tongue, involving the lateral sulcus, anterior tonsillar pillar and lower pole of tonsil left side. A biopsy was taken from the same area and sent for histopathological examination with a strong clinical suspicion of squamous cell carcinoma. The final histopathological diagnosis was tuberculosis of tongue. The patient showed good response on ATT.

Key words

Tuberculosis tongue, Tuberculosis oral cavity, Primary tuberculosis tongue, Primary tuberculosis oral cavity, Growth at base of tongue.

Introduction

Tuberculosis is an infectious disease that has displayed increasing incidence in the last decades. In 2011, the WHO estimated the incidence of tuberculosis around 8.3 - 9 million cases worldwide [1]. It is estimated that up to 20% of tuberculosis cases affect extra-pulmonary organs [2]. In the ENT area, the most common onset is cervical lymphadenitis, which accounts for 95% of ENT cases. All other locations such as the larynx, ear, nasal passages, pharynx, tonsils, mastoid, nasopharynx, or salivary glands, account each for less than 1% of all cases [3]. Especially rare is the location in the oropharyngeal region, in which the palatine tonsils are affected in 45% of the cases. The

posterior pharyngeal wall, tonsillar pillars, sidewalls, soft palate, and tongue are the least probable locations [4]. Oral mucosal lesions of tuberculosis are mainly secondary to pulmonary tuberculosis and rarely primary in origin [5].

The clinical presentation of tuberculosis may take many forms. However, with the decline in numbers, tuberculous lesions of the oral cavity have become so rare that they are frequently overlooked in the differential diagnosis of oral lesions.

Case report

A 40-year old male, presented with history of pain throat since one month along with complaint of difficulty in swallowing food since one month. He had received previous medication but the lesion had failed to heal despite the administration of antibiotics and other topical mouthwashes. It had slowly enlarged and was painful, eventually restricting him to a liquid diet.

The patient was a heavy smoker since last 10 years. There was no history of fever, loss of weight, loss of appetite or cough with/ without expectoration.

On presentation, he was conscious, oriented to time, space and person. Temperature was 98 F, pulse of 72/min, blood pressure of 130/72 mmHg with respiratory rate of 18 cycles per minute. On physical examination, there was no evidence of cervical lymphadenopathy, pallor, icterus or organomegaly. On systemic examination, lungs were clear to auscultation, heart showed regular rate and rhythm without murmur and abdomen was soft, non-tender, and non-distended with positive bowel sounds. No hepatosplenomegaly was noted.

Chest X-ray together with laboratory tests including complete blood count, coagulation profile, urea and electrolytes, as well as renal and liver function tests were reported to be within normal limits.

There was a growth at base of tongue, involving the lateral sulcus, anterior tonsillar pillar and lower pole of tonsil left side.

A biopsy was taken from the same area and sent for histopathological examination with a strong clinical suspicion of squamous cell carcinoma. However biopsy showed numerous mononuclear inflammatory cells with epitheloid granulomas, Langerhans type giant cells and caseous necrosis. A final histopathological diagnosis of tuberculous lesion was made (**Figure – 1, 2, 3**).

Figure – 1: Langerhans type giant cells (H and E, 40X).

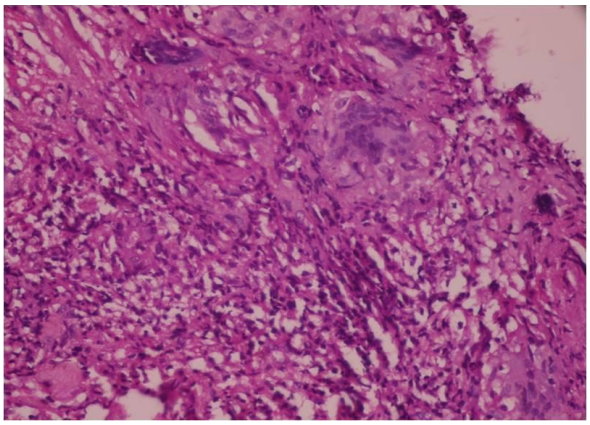
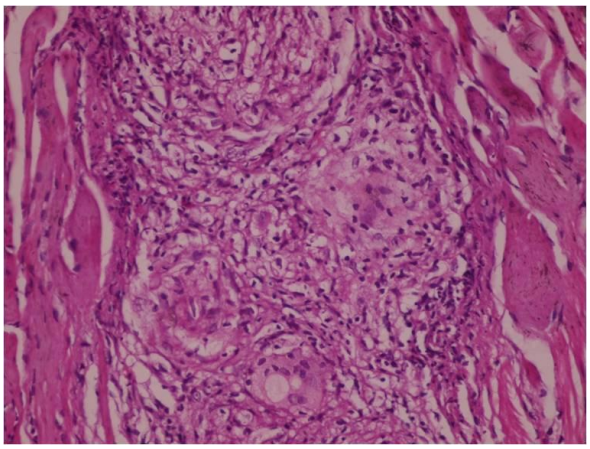
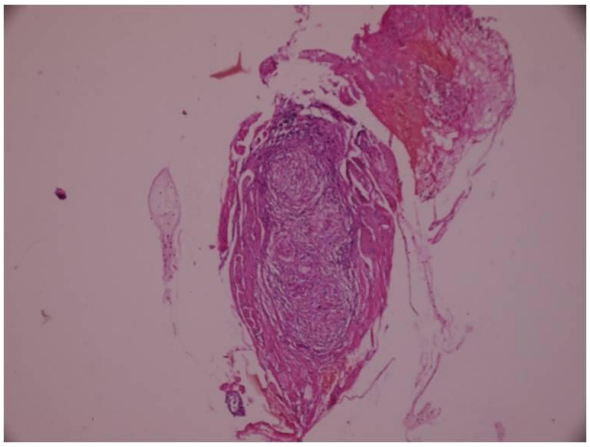


Figure – 2: TB Granuloma (H and E, 40 X).



The case was reported as Primary tuberculosis of tongue in the absence of any pulmonary lesion. The patient was started on ATT and follow up showed good initial response.

Figure – 3: TB Granuloma (H and E, 4X).



Discussion

Oral manifestations of TB are rare because saliva continuously acts on the bacilli and prevents it from depositing on oral tissue. When bacilli achieve penetration of the mucosa, they are phagocytized and incorporated into the circulation without causing oral lesions [6, 7]. The mucosa is not environmentally suitable for development of mycobacterium tuberculosis [8]. The clinical characteristics of TB in the mouth can be primary which is rare or secondary, much more common infections [9].

Primary tuberculosis of oral cavity including tongue is very rare. It has been suggested that tongue involvement usually occurs due to contact with the infected sputum or by blood spread, or by direct contamination from the neighboring tuberculous focus in the oral cavity. A breach in the mucosa due to any reason is one of the important predisposing factors [10].

Tuberculosis of the oral cavity frequently simulates cancerous lesions and others like traumatic ulcers, aphthous ulcers, actinomycosis, syphilitic ulcer or Wegner's granuloma. The histopathological differential diagnosis includes other orofacial granulomatous conditions such as Sarcoid, Crohn's disease, deep mycoses, cat-scratch disease, foreign-body reactions, tertiary syphilis and Melkersson -Rosenthal syndrome [11].

Oral tuberculous lesions may take the form of nodules, ulcers, and elevated fissures. Ulcers are irregular with undermined edges, are painful and increase slowly [12].

The differential diagnosis is made with the identification of a caseating granuloma with associated epitheloid cells and giant cells of the Langerhans type during histological evaluation of biopsied tissue. We believe our case to be primary tuberculosis of the tongue as we could not detect any other primary focus.

Furugen, et al. searched sixteen recent cases of tuberculosis of tongue in Japan and found that there was increased incidence if the patients harboured concurrent sputum positive pulmonary tuberculosis and there was delay in diagnosis [13].

Kumar, et al. described a case of primary lingual tuberculosis diagnosed by FNAC in an immunocompetent patient [14].

Memon, et al. found a case of primary lingual tuberculosis which was diagnosed after second biopsy, the initial biopsy was non-specific inflammation [15].

Sharma et al reported a case of primary tuberculosis of tongue in a 49-year-old female patient [8].

Although rare, an early suspicion and timely intervention can lead to a favorable outcome in such cases, both for the patient and community. Even though primary tuberculosis in the oral cavity is a rare finding, it must be included in differential diagnosis of the mucosal lesions in the oral cavity. Histopathological examination can act as an important diagnostic tool for an early and rapid diagnosis of such lesions.

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