Primary Tuberculosis of Tongue

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Abstract

Tuberculosis is a granulomatous disease caused by mycobacteria.¹ The lung is the most common site of involvement, and it is very rare to involve the oral cavity.¹ Most of the tuberculous lesions of oral cavity are secondary to lung disease, usually seen in elderly patients.¹ Primary tuberculosis of the oral cavity is rare and is most commonly found in children and adolescents rather than in adults.¹ Among them tuberculosis of tongue is very rare. Here we report a first case of our hospital with primary tuberculosis of tongue in a 55-year-old male from Madhya Pradesh.

Introduction

Most of the tuberculous lesions of oral cavity are secondary to lung disease, usually seen in elderly patients.¹ Here we report a first case of our hospital with primary tuberculosis of tongue in a 55-year-old male from village Guna (Madhya Pradesh).

Case Summary

A 55 yr old male, without any comorbidities and h/o smoking bidis (10-14 per day), farmer by occupation with no any history of major medical or surgical past history presented to us with complaints of multiple oral and tongue ulcerations. He had poor oral hygiene. Initial clinical evaluation was non-conclusive. Chest was clear without any abnormality, other systemic-examination and vital parameters were normal so he was sent home with medicines prescribed for the lesions thought as aphthous ulcerations. However patient returned after 7 to 10 days with increased tongue ulcers, becoming more deep and eroded with purulent discharge from tongue base. Figure 1 a laboratory parameters showed that ESR (erythrocyte sedimentation rate) was high (more than 50 mm/hr). Patient also complained of having low grade fever without chills. Hence we suggested a tongue biopsy. After written consent of patient biopsy were taken from tongue as well as tonsils.

The histopathological report of tongue lesion showed lymphoid follicles with scattered variable sized lymphoepithelioid granulomas containing Langhan’s type giant cells, with surrounding chronic inflammatory cells. The conclusion was made of having Tubercular lesion. We further suggested having AFB culture however it was not done due to some personal reasons from patient side. He was explained about the condition and initiated anti-tubercular treatment (AKT) with 4 drug and asked to follow-up regularly. The importance of drug compliance and possible adverse events was explained. Patient came for follow-up after end of 1st, 2nd month and 4th month subsequently. There were significant reduction in his tongue lesions and he was very comfortable with the resolution. At end of 4 month therapy almost 80% to 90% reduction of tongue lesions occurred (Figure 1). Further, patient was lost to follow-up.

In view of the lesions, biopsy findings and improvement with giving anti-tubercular treatment, the diagnosis was made as tuberculosis of tongue which is an uncommon presentation of common disease.

Discussion

Primary tuberculosis of tongue is a very rare disease. It has been suggested that tongue involvement usually occurs by direct contamination from the neighboring tuberculous focus in the oral cavity or due to contact with the infected sputum or by hematogenous route. A breach in the mucosa due to any reason is one of the important predisposing factors.¹ Weaver⁵ reported that 1-1.5% cases of pulmonary tuberculosis show tuberculosis of oral cavity, the sites most frequently affected are tongue, palate, tonsil, pharynx, and buccal mucosa. Nagar et al⁶ also reported a case of primary tuberculosis of palate.

Panek et al⁷ described a case of tuberculosis of tongue associated with pulmonary lesion, diagnosed by thin-needle biopsy. In the present case, biopsy was taken from right and left tonsils as well as from the lesion over the tongue. Fibre-optic bronchoscopy was also performed subsequently for evaluating further spread or extent.

In view of the lesions, biopsy findings and improvement with giving anti-tubercular treatment, the diagnosis was made as tuberculosis of tongue which is an uncommon presentation of common disease.
of disease down the respiratory tract however it was confirmed normal. Identification of AFB by Z-N stain is confirmatory, but this is frequently negative in tissue sections. The diagnosis thus rests on finding the typical granulomas and caseation necrosis of tuberculosis. In some cases, the diagnosis of lingual tuberculosis resulted in the detection of pulmonary lesion which is interpreted as blood-stream dissemination. Memon et al also found a case of primary lingual tuberculosis which was diagnosed histopathologically after a second biopsy, the initial biopsy report was nonspecific inflammation. We believe this to be primary tuberculosis of the tongue as we could not detect any other primary focus. Oral tuberculous lesions may take the form of nodules, ulcers, and elevated fissures. Ulcers are irregular with undermined edges, are painful and increase slowly.

Clinically, the diagnosis of oral tuberculosis is not possible and histopathology provides a reliable diagnostic clue as in this case. Further, the diagnosis may be confirmed by detection of AFB and/or culture for M. tuberculosis. Due to selective scarcity of bacilli within tissue, mycobacteria can be demonstrated only in 27-60% of cases. Culture of mycobacteria has good result but it lacks sensitivity and takes 4-6 weeks. Chest X-ray is done to exclude the possibility of pulmonary tuberculosis. It is to be differentiated from nonspecific ulcerative lesions, traumatic lesions, and early malignant lesions. We need to be aware of this condition for early diagnosis and treatment.

References