

TUBERCULOSIS OF ORAL MUCOSA

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Abstract

Tuberculosis is a chronic granulomatous disease that affects various systems of the body but rarely oral cavity. Oral cavity tuberculosis is often a consequence of active pulmonary tuberculosis and is relatively rare. This is a rare case of 40 years old male presenting with an irregular indurated area on right side of buccal mucosa. Histopathology of lesion revealed tuberculosis. Hence, tuberculosis must be included in the differential diagnosis of oral mucosal lesions to avoid any serious complications.

INTRODUCTION

Tuberculosis of the oral cavity is relatively rare, only few cases have been reported in the literature, [1,2]. Most of the cases of oral tuberculosis are found to be associated with primary foci elsewhere in the body thus making tuberculosis of oral cavity extremely rare, [3,4,5,6,7]. Because of the rarity of this disease at this site clinically to suspect a case as tuberculosis is difficult. Definite diagnosis can only be made after histopathological examination.

CASE REPORT

A 40 years old male patient presented with a slowly progressing raised, rough, irregular indurated area measuring 1x1.5 cm over the right buccal mucosa for three months. He also complained of malaise and weight loss for sometime. There was no history of cough and fever. Patient was non-smoker and non-alcoholic but was tobacco chewer for the past twelve years. The physical examination did not revealed any abnormality. He received few courses of anti-inflammatory drugs and multi-vitamins but without any improvement.

His laboratory investigations revealed Haemoglobin 13.4gm%, total leukocyte count 9,400 /cmm with polymorphs 65, lymphocytes 30, erythrocytes 03 and monocyte 02; erythrocyte sedimentation rate was 39 mm in first hour (wintrobe). His blood sugar levels were 89.7 mg/dl (fasting) and 120.0 mg/dl (postprandial). Serology for HIV (I and II) and HBs Ag were negative. A deep open biopsy of oral mucosa was obtained.

Histopathological examination revealed chronic granulomatous inflammation consisting of multiple

coalescing caseating epithelioid granulomas with multiple langhans' giant cells, lymphocytes, plasma cells and macrophages covered with hyperkeratinized squamous epithelium (Figure-1), (Figure-2).

Figure 1

Figure- 1- (H&E 100X) showing many epithelioid granulomas with langhans' giant cells

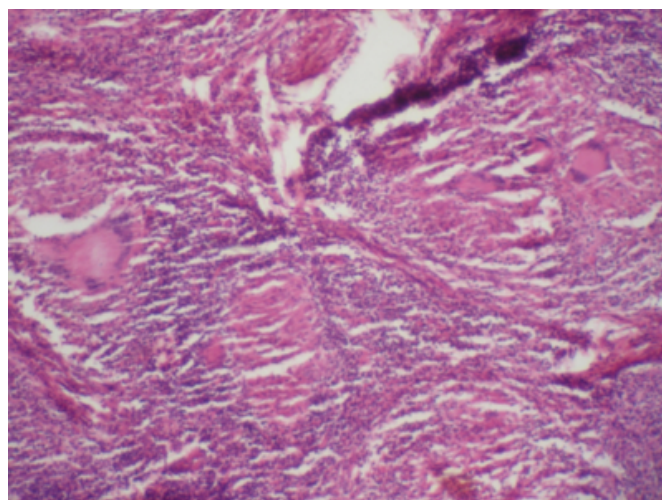
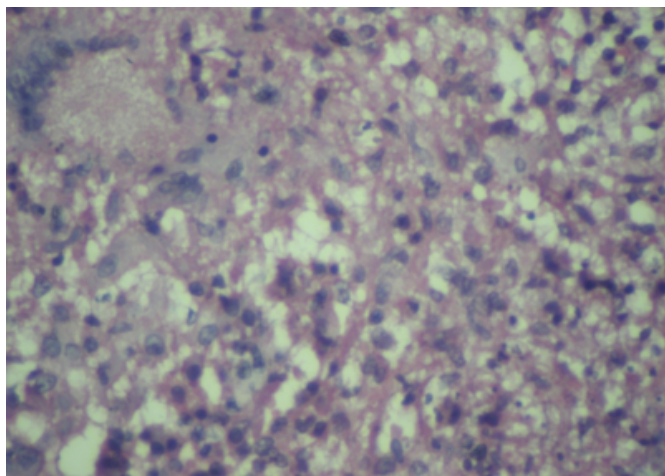


Figure 2

Figure- 2- (H&E 400X) showing area of caseous necrosis with one langhans' giant cell



Ziehl Neelsen staining for acid fast bacilli (AFB) was negative. Any fungal elements were not identified. With this unusual tissue diagnosis patient was investigated for primary foci of tuberculosis. His chest x-ray was normal and sputum examination for presence of acid fast bacilli was negative. Mantoux test was non-reactive. Any other focus of tuberculosis could not be found. The patient was put on four drug anti-tubercular treatment (Rifampicin, Ethambutol, Pyrazinamide and Isoniazide). Follow-up at one month after treatment showed marked clinical improvement.

DISCUSSION

Involvement of oral cavity in tuberculosis is extremely rare even in populations with high incidence of the pulmonary disease,[2,6]. Saliva is believed to have a protective effect, which may explain the paucity of oral tubercular lesions. It has been suggested that organism enter the oral mucosa through a small breach in the surface "or" poor oral hygiene, leukoplakia, local trauma and clove chewing may facilitate this process, [7]. Self inoculation by patient may results from infected sputum or by hematogenous or lymphatic dissemination.

Ramakant et al,[8] described a case of tuberculosis of oral cavity associated with asymptomatic primary pulmonary tuberculosis. Similarly, Panek et al, [5] reported a case of tuberculosis of tongue, associated with the primary lesion in lungs. Here we are presenting a case which we believe to be primary tuberculosis of oral mucosa as no other primary

focus of tuberculosis could be found. We presume that due to long history of tobacco chewing, patient might have developed minor breach in oral mucosa which favoured the entry of organisms.

Weaver, [3] has reported that only 1-1.5 % of cases of pulmonary tuberculosis may involve oral mucosa, palate, tongue, tonsils and pharynx. Nager et al, [4] reported a case of primary tuberculosis of palate as any other foci of tuberculosis were not found. Garg et al, [9] found a case of primary tuberculosis of tongue as confirmed on excisional biopsy. Menon et al, [10] also reported a case of primary lingual tuberculosis without any other site of involvement.

Because of rarity, such lesions are not suspected clinically to be

tuberculosis and a reliable diagnosis can only be made on histopathological examination "or" by demonstrating acid fast bacilli in tissue sections, however Ziehl Neelsen staining is frequently negative in tissue sections, as was in the present case.

It is therefore suggested that tuberculosis must be included in the differential diagnosis of oral mucosal lesions despite its rarity at this site as early diagnosis and treatment is necessary.

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