

## Tuberculoma of the cheek: a case report

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### Abstract

Tuberculoma of the cheek in the absence of tuberculosis elsewhere in the body is rarely seen and hence rarely thought of as a differential diagnosis when such a patient presents.

In the following case, the patient was provisionally diagnosed as carcinoma of the cheek because of the exophytic nature of the growth and its presentation. However, histopathology of a biopsy revealed tuberculoma and the response to antituberculous therapy was rapid and curative.

**Key words:** Tuberculoma; Cheek

### Introduction

Tuberculous lesions of the oral cavity do occur but are relatively uncommon. This relative rarity of tuberculous disease of the mouth has been accounted for by its rich blood supply, the thickened resistant epithelium, the motion of the parts and the germicidal and mechanical properties of the mucus and saliva (Myerson, 1944).

There is a general agreement that tuberculosis of the oral cavity is seldom primary, but rather secondary to a pulmonary disease. The characteristic tuberculous lesion in the oral cavity is an irregular, superficial or deep, painful ulcer, which tends to increase slowly in size. Lesions may occur anywhere in the oral cavity but are most frequent on the tongue base (Keyes, 1980), the palate (Myerson, 1944) or the gingiva (Eng *et al.*, 1996). Tuberculoma involving the cheek has rarely been described in the literature.

### Clinical history

A 50-year-old male patient presented with a progressively increasing growth on the left buccal mucosa for six months. This had been associated with pain and odynophagia for four months. There was no history of bleeding from the growth or preceding trauma to the site. He had no personal or family history of tuberculosis. He gave no history of addictions.

On examination, oral hygiene was poor with dental plaques and absence of several teeth which had fallen out due to caries. There was an ulceroproliferative growth over the left buccal mucosa extending from the level of the left lower incisor (lateral border) to the left second molar, about  $3 \times 4 \times 1$  cm in dimension (Figure 1). The growth was within the confines of the buccal mucosa and not involving the gingiva or the lips. It was firm but not hard and the surrounding area was not indurated. Tenderness was present but there was no bleeding on touch. There was slight pallor on clinical examination. There were no clinically palpable cervical lymph nodes and no constitutional symptoms or signs suggestive of tuberculosis. All other systems were normal on clinical examination.

A punch biopsy was taken and sent for histopathology to rule out carcinoma. The histopathological picture was that of tuberculosis with epithelioid cells, Langhan's giant cells, lymphocytes, fibroblasts and central necrosis (Figure 2). The blood reports were – Hb 9.2 gm % T.C. 9,000/cmm, lymphocytes 67 per cent, neutrophils 30 per cent, eosinophils 0.3 per cent, ESR 56 mm at the end of one hour (Westergren). Chest X-ray was clear.

The patient was started on a four drug anti-tuberculous regime consisting of isoniazid 300 mg, rifampicin 450 mg, pyrazinamide 1.5 gm and ethambutol 800 mg orally with pyridoxine and a high protein diet. Also his oral hygiene was improved. Within three weeks of starting this therapy, a visible regression of the lesion with absence of pain was noticed (Figure 3). The treatment was continued and, within four months of therapy, the lesion regressed completely with normal appearance of the buccal mucosa. He was continued on the four drug regime for two months following which ethambutol was stopped and all other drugs continued for the next six months. After a total of



FIG. 1  
Tuberculoma of the left buccal mucosa at the time of presentation.

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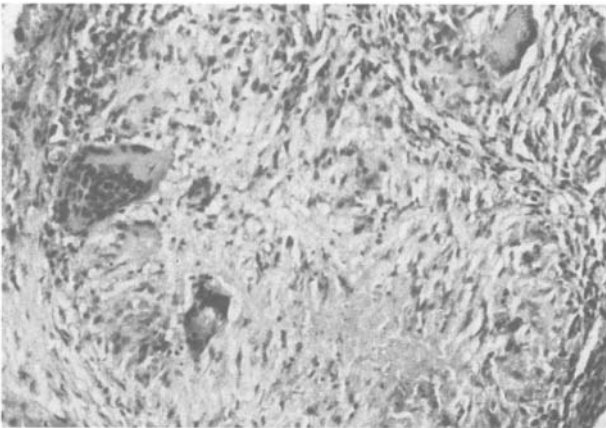


FIG. 2

Histopathological appearance of the tuberculoma – Micro-photograph showing central caseous necrosis, epithelioid cells, Langhan's giant cells, lymphocytes and fibroblasts H & E  $\times 100$

nine months of therapy, a repeat biopsy showed normal healthy mucosa.

### Discussion

Primary tuberculosis of the oral cavity is a rare entity. Usually, the microorganisms need a disruption of the oral mucosa to become pathogenic (Junquera Gutierrez *et al.*, 1996).

A large ulceroproliferative (tuberculoma) lesion on the buccal mucosa is a very rare presentation of tuberculosis of the cheek. Among all sites involved by tuberculosis, the cheek is the rarest. Usually tuberculosis of the oral cavity is seen to affect the tongue or palate as ulcerative lesions. The lesions in the oral cavity are commonly associated with active pulmonary tuberculosis (Baker, 1986). The clinical picture can be easily confused with carcinoma due to the extreme rarity of the lesion. However, histopathological examination of a biopsy is the mainstay for a conclusive diagnosis.

The oral cavity presents two forms of tuberculosis – the ulcer and the polypoid lesion. Ulcers are more common; they are flat, irregular and have a granular base. They are usually covered with mucus. Such lesions have an increased flow of mucus and saliva as a result of which the patient becomes dehydrated. Tuberculomas are most frequently found in the tooth sockets and on the buccal mucosa, occurring as single, isolated lesions (Myerson, 1944).

In our patient, the large size, site and ulceroproliferative nature of the lesion, age of the patient and duration of symptoms were in favour of a carcinoma of the cheek as tuberculosis, although common in India, is rarely seen at this unusual site and in the absence of active pulmonary involvement. However, presence of pain and absence of



FIG. 3

Regression of lesion after three weeks of anti-tuberculous therapy.

bleeding in this lesion should alert a clinician to the possibility of tuberculosis. Histopathological examination is conclusive in the diagnosis. This is most important as therapeutic management is curative.

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