



## TUBERCULAR ULCER ORAL CAVITY MIMICKING MALIGNANCY-WONDER FACE BEHIND MASK.

### Oncology

**Dr Neelesh Shrivastava**

Senior Resident, Department of Surgical oncology, JIPMER

**Dr**

**Balasubramanian** Professor, Department of Surgical oncology, JIPMER

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### ABSTRACT

Oral tuberculosis (TB), a chronic inflammatory disease, can manifest as oral ulceration and mucosal erythema. This article presents a case of an oral ulcer on the right side's palatal area. Clinicians must be aware of TB while assessing a differential diagnosis for oral ulcers. A delayed diagnosis might have serious consequences for the patient.

### KEYWORDS

Oral ulcer, Oral tuberculosis, Incision Biopsy, Anti tubercular therapy, Squamous cell carcinoma hard palate

### INTRODUCTION

In both urban and rural settings, the frequency of tuberculosis differed according to sex. In India, 295.9/100,000 people have pulmonary tuberculosis that has been confirmed by a bacteriological test. Comparatively speaking, men are more likely than women to have pulmonary tuberculosis. Pulmonary tuberculosis is more common in rural regions than in cities.<sup>1</sup>

Only 0.05–1.5% of cases of tuberculosis have oral signs, making oral tuberculosis a rare occurrence. Atypical or chronic ulcers, which are the hallmark of oral tuberculous lesions, can lead to a false-positive diagnosis of malignancy, deep mycotic infection, syphilis, traumatic, or aphthous ulcers. Ulcers frequently present as isolated lesions.<sup>2</sup>

### Case Report

In November 2020, A 45-year-old female was seen our OPD for evaluation of a right hard palate ulcer that was not healing. One month prior, she discovered the ulcer while performing basic oral hygiene. Eating was challenging because of the painful ulcer. She had no further symptoms. Her prior medical history was inconsequential. Additionally, there was no notable family history of Tuberculosis.

Clinical examination revealed an enlarged Left Level IB lymph node. She had an ulcerated lesion on the hard palate near her upper right third and second molars. It was 4x2 cm in size and had slough and granulation tissue at the base. (Figure 1)



**Figure 1 Ulcer with a base formed by slough and granulation tissue**

Although the palate is an unusual location for an oral cavity carcinoma, the ulcer was suspected to be malignant in nature. Syphilis, tuberculosis, a large recurring aphthous ulcer, and hard palate carcinoma were all included in our differential diagnosis. The patient's incisional biopsy, which had already been performed elsewhere reported as having features suspicious of squamous cell carcinoma, was sent to us for slide review. Neck ultrasound revealed large level IB lymph nodes with loss of fatty hilum on the left side and notable reactive nodes at levels I, II, and III on the right side. Her CECT neck and thorax reveal an uneven, heterogeneously enhancing mucosal

thickening of size 2.4cmx1cm along the lateral border of hard palate on right side. Inferomedially lesion seems to be in close contact with the dorsal aspect of posterior 3rd of the tongue. No adjacent bony erosions was noted, Multiple enlarged enhancing bilateral level IA, IB II,III cervical lymph nodes with few of them showing central necrotic areas largest of size 2.3cm X.4cm in left level IB.

The patient returned a week later for the results of her biopsy which was submitted for review showed two tissue bits lined by acanthotic stratified squamous epithelium with one of the tissue show ulceration and granulation tissue formation with acute and chronic inflammatory cells. The overlying epithelium shows inflammatory atypia. The sub epithelium shows multinucleated giant cells with areas of necrosis along with acute and chronic inflammatory cells. The other bit in addition shows ill defined, granuloma and adjacent salivary glands Ziehl-Neelsen stain for AFB is positive. On further evaluation her HIV test was Negative and AFB smear was positive for tuberculosis. The patient was started on ATT, She was kept under regular review with respiratory physician during treatment period. She has had no signs or symptoms of tuberculosis to date. The ulcer resolved in oral cavity in between the course of therapy.

### DISCUSSION

It is possible for pulmonary tuberculosis to spread to the head and neck area.<sup>3</sup>The oral mucosa of a person with primary oral tuberculosis is directly infected with the organisms if they have never been exposed to them before. Self-inoculation-caused secondary type linked to pulmonary TB. Children and teenagers frequently develop mouth lesions with the primary form of tuberculosis. With a focus on the tongue and the hard palate, the secondary type is more common in adults and older people.<sup>4</sup>

An ulcer, which has irregular margins and little indurations, is the most frequent lesion that can develop in oral tuberculosis. An ulcer's base could be granular or coated with a pseudo membrane, as was the case in our case. Oral TB ulcers can occasionally appear as patches, indurate soft-tissue lesions, superficial ulcers, or even lesions inside the jaw that may be in the form of TB osteomyelitis. The oral mucosa's intact squamous epithelium may operate as a barrier to infection and prevent TB bacilli from entering the body. Lowered host resistance and higher organism virulence were among the systemic characteristics that raised the likelihood of oral TB infection.<sup>5</sup> in our case breaching of mucosal barrier can be the cause of tubercular penetration in to the deeper tissue. Even though oral TB can manifest at any stage of the disease, it may be the first sign of HIV disease.<sup>6</sup> HIV infection was negative in our case.

Oral Tubercular lesions can be mistaken for cancer, especially squamous cell carcinoma, in which case a biopsy is required.<sup>6</sup> a diagnosis of tuberculosis is only made when a granulomatous lesion and the presence of acid-fast bacilli on Ziehl-Neelsen staining are found during a histological investigation. Ziehl-Neelsen stain revealed tubercular bacilli in our case upon slide review. In order to rule out

pulmonary tuberculosis, the diagnostic work-up should additionally include a sputum examination for acid-fast bacteria, sputum culture, polymerase chain reaction, and chest radiography. In our case sputum for AFB was positive on further evaluation. However, the x ray chest didn't reveal any radiological feature of pulmonary tuberculosis.

The most common treatment plan includes isoniazid, rifampicin, pyrazinamide, and ethambutol. These drugs are administered daily for the first two months, followed by another four month period with only isoniazid and rifampicin intake.<sup>6</sup> The success of treatment appears to be attributed to the subsites effective vascularity, as the clinical lesions are described to improve after a few months.<sup>7</sup> In our case lesion disappeared after 2 months of treatment with drugs. We encourage the patient to take full course of treatment to complete eradication of bacteria.

#### CONCLUSION –

Oral Tuberculosis is rare and provides diagnostic challenge by masquerading the more common and potentially lethal Cancers. High suspicion of the possible differential diagnoses would help the surgeon to avoid delay in diagnosis.

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