

# Rare and Unusual Cause of Ulceration of the Inner Cheek

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**Abstract:- Mouth ulcers and mouth inflammation are variable in appearance and size and can affect any part of the mouth, the types and causes of mouth ulcers are many and vary widely. These can be caused by infection, system disease, a physical or chemical irritant, or an allergic reaction. In this work, we report the observation of a patient presenting an ulceration of the inner right cheek whose etiological assessment revealed a rare cause for an unusual location.**

**Keywords:-** Ulcer, Inner Cheek, Tuberculosis.

## I. INTRODUCTION

Tuberculosis (TB) is a chronic infectious disease caused by Mycobacterium tuberculosis. The lung is the most common site, followed by lymph node damage. However, any organ in the body can be affected. Extra-pulmonary tuberculosis accounts for 25% of cases of which 10-15% have been detected in the head and neck region, with oral involvement estimated at less than 5% of total tuberculosis cases. [1,2]

## II. CASE REPORT

We report in this work the story of a 45-year-old patient with a history of alcoholism and chronic smoking ceasing 2 years ago, without any notion of atopy, no notion of follow-up for a particular system disease.

The patient presented for a consultation with a chronic ulcerative lesion on the inside of the right cheek that had progressed for 4 months, painful, interfering with eating, bleeding on contact, without lymphadenopathy, cough, or other associated signs. (Figure 1)

The clinical examination objectified an ulceration of the internal face of the right cheek, measuring 2 centimeters long, well limited, without extension towards the Stenon, cervical palpation discovered lymphadenopathy. The remainder of the body exam was normal. Faced with this clinical picture, we first evoked a cancerous pathology, a biopsy was performed under local anesthesia, the surprise was that the anatomopathological study showed a significant polymorphous inflammatory infiltrate with the presence of epithelioid granulomas centered on caseous necrosis in favor of caseo-follicular tuberculosis. (Figure 2) An x-ray of the lung which returned to normal and a retroviral serology which returned positive.

The patient was referred to the internal medicine and infectious diseases department for retroviral treatment and for anti-tuberculosis treatment consisting of a combination of 4 drugs [isoniazid (INH), rifampicin (RIF), pyrazinamide (PZA) and ethambutol (ETO)] administered daily for the first 2 months, followed by an additional 4 months with 3 drugs (INH, RIF and retroviral).

The patient was seen again in consultation 2 months after starting the treatment, the endo-oral examination showed a decrease in the diameter of the lesion, one year after the evolution was satisfactory with the total disappearance of the ulceration.

### III. DISCUSSION

Tuberculosis (TB) is a chronic granulomatous infectious disease that can affect various parts of the body, including the oral cavity caused by *Mycobacterium Tuberculosis*. [2]

According to the World Health Organization, tuberculosis is a major public health problem, which can cause 1.7 million deaths a year worldwide, with about 10.4 million people infected in 2016, 90% of whom were adults, 65% were men, 10% were people living with HIV. [1,3]

Lung disease remains the most common form, while extra pulmonary TB, particularly in the head and neck region, is found in 10% to 15% of cases, of which only 10% are in the buccal cavity. [4]

Primary oral TB lesions without lung damage are extremely rare and generally seen in younger subjects, while most oral lesions are a secondary infection. [2,5]

Risk factors include poor oral hygiene (periodontitis, caries, etc.), trauma, leukoplakia, and immunosuppressed conditions such as HIV, diabetes, malnutrition, prolonged corticosteroid therapy and chronic kidney failure. [4,5]

Clinically, it comes in the form of painful, irregular, and indurated ulcers most often or cracks, nodules etc. Associated with an enlarged cervical ganglion. The most affected site is the tongue, gum, lips, palate, palate amygdala and floor. [2,5,6] The peculiarity of our observation is the

attainment of the inner face of the cheek which very little reported in the literature.

Faced with this chronic ulcer, the diagnosis of tuberculosis is often misunderstood or forgotten by clinicians in the face of the multitude of differential diagnoses ranging from a simple trauma, syphilitic or syphilitic carcinoma squamous cell leading to a misdiagnosis. Physicians and dentists should be aware of the oral lesions of tuberculosis and take them into account in the differential diagnosis of suspect oral ulcers.

Namely that oral tuberculosis is a disease paucity of bacilli and the concentration of acid-resistant bacillus (BAA) is significantly lower in saliva which makes the sensitivity of microscopic examination as well as the culture very low. In various studies, the positivity of the AFB smear in various biopsy samples of the oral lesion was found at around 7.8%. [6]

The histopathological study of a biopsy sample is necessary to rule out a carcinogenic origin but also to confirm the definitive diagnosis of TB by highlighting a classic caseous granuloma with central necrosis, surrounded by epithelioid cells, type of Langhans giant cells and lymphocyte infiltrate. However, under immunosuppressed conditions such as acquired immunodeficiency syndrome, there may be an unseeded granuloma. In the majority of cases, a single biopsy may not be sufficient as granulomatous changes may not be evident in early lesions. Sometimes repeated biopsies seem to be necessary. [4,7]

If oral tuberculosis is diagnosed, it is important to supplement with a full somatic examination, chest x-ray and Mantoux skin test to eliminate systemic tuberculosis and retain the primary character of oral impairment. [8]

Oral TB treatment is identical to systemic form, consisting of a combination of 4 drugs [isoniazid (INH), rifampicin (RIF), pyrazinamide (PZA) and ethambutol (ETO)] administered daily for the first 2 months, followed by an additional 4 months with 3 drugs (INH, RIF and ethambutol). [1,4,9]

### IV. CONCLUSION

Despite the rarity of oral TB, whether primary or secondary, clinicians should include and think about this diagnosis as a differential diagnosis of any questionable chronic ulcerative lesion. The value of early diagnosis with prompt and appropriate treatment ensures a complete recovery of the patient but also the cessation of the spread of the disease.

### CONFLICT OF INTEREST:

The authors declare no conflict of interest.

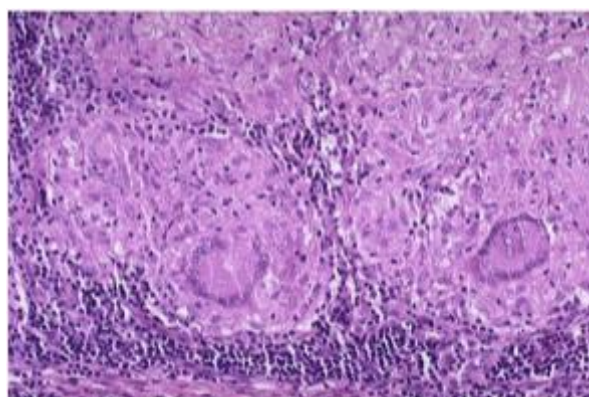
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## FIGURES



**Fig 1:-** Intraoral photograph showing the ulcer of the inner right cheek, with well-defined erythematous margins and covered by a yellow necrotic layer.



**Fig 2:-** Histopathology of buccal mucosal biopsy section showing multinucleate Langhans giant cells and granulomatosis with foci of caesous necrosis and plenty of lymphocyte.