

Case report

Rare presentation of Tuberculosis as a curious oral ulcer: A case report

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ABSTRACT

Tuberculosis, a chronic granulomatous disease ,can affect any part of the body including parts of the oral mucosa. It can present as a primary or secondary disease. Here we report a case of tb in the buccal mucosa secondary to pulmonary tuberculosis with symptoms of the primary presenting later. Diagnosis was made based on histopathology, sputum examination and radiological evaluation . Patient was started on appropriate anti tubercular drugs and is now improved symptomically .Physicians and dentists must be aware of such rare presentation of tuberculosis so that they can initiate patient on appropriate treatment without any delay.

Keywords: Tuberculosis, Buccal mucosa, TB oral cavity

INTRODUCTION

Tuberculosis has been known to mankind since the ancient times. It is a chronic granulomatous disease caused by Mycobacterium Tuberculosis ,which is primarily transferred via inhalational route by droplet infection. Tuberculosis still remains a major cause of morbidity , eventhough advancements in drug research and molecular tools for detection of TB have drastically reduced its incidence. According to World Health Organization, After HIV , TB is the second most dreaded disease causing death globally.Worldwide, 10 million people have been affected by TB in 2018(1). TB can affect any organ in the body, but commonly affected organ is the lung. TB affecting the oral cavity is a rare occurrence.

The incidence of oral TB lesions is 0.05-5 % and it can either be primary or secondary.(5) . M. tuberculosis can infect the hard palate, soft palate, lips, tongue, gingivae, buccal mucosa, maxilla and mandible and most commonly presents as an ulcerative lesion. Oral TB is also found more among men compared to females. Secondary lesions are more common among the older age group. Here we report a case of Tb of oral/ buccal mucosa secondary to pulmonary tuberculosis where systemic manifestations of the primary presented later.

CASE REPORT

A 54 year old male , presented to the OPD with painful right buccal mucosal ulceration near 3 rd molar tooth since 25 days. He also had lip excoriation associated with difficulty in eating food due to pain. The oral ulcer was initially small and gradually enlarged over a period of one month .H/o second molar tooth extraction 20 days ago. The

patient also had cough with expectoration, and evening rise of temperature for past 15 days and a history of loss of weight and appetite.. He is a chronic smoker and alcoholic for 20 years . No h/o tobacco chewing.

On examination the patient was febrile and pan digital clubbing was present. Oral examination revealed tender, shallow ulcer of size 1 X 1.5 cm with irregular margins, covered with mucopurulent discharge. On palpation ulcer was indurated and had raised margins. On left side unhealthy mucosa with submucosal swelling at the level of second molar tooth observed. Neck examination revealed no significant lymphadenopathy. Respiratory system examination showed right sided suprascapular crepitations . Other system exam was normal.

Routine blood investigation showed raised TLC count of 17500 and ESR was elevated to 40 mm at 60 mins. Both HIV and Mantoux were negative. Sputum for AFB was scanty positive and **Gene Xpert** of sputum showed MTB sensitive to rifampicin. Chest x-ray showed patchy opacities scattered over both lung fields and plain CT of thorax showed multiple randomly distributed small nodules in both lungs with small cavitatory lesions in upper lobes and mediastinal lymph nodes. **Wedge biopsy** of both side buccal mucosa was done and it was s/o caseating granulomatous lesion with AFB stain positive of bacilli within the granuloma.



Figure 1: Lip excoriation and Right buccal mucosal ulcer



Fig2: CXR showing bilateral infiltrates

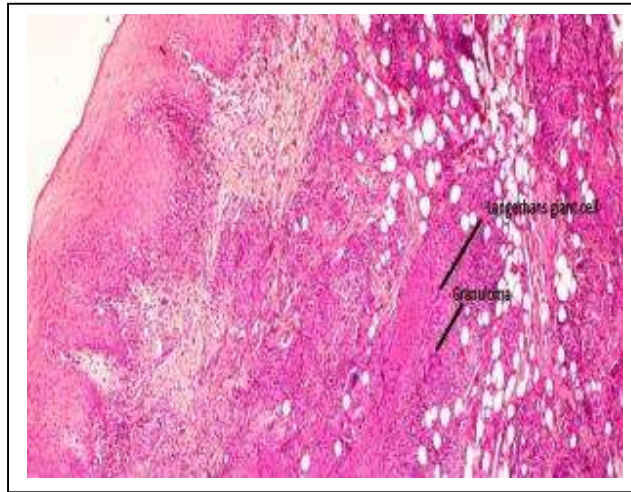


Fig 3: Improvement post 4 week of ATT 1

Correlating the patient's history, clinical examination, laboratory investigation, and histopathological examination, a final diagnosis of Disseminated TB was given due to tuberculous granuloma of oral cavity and sputum positive pulmonary tuberculosis. The patient was then started on Cat 1 ATT which consisted of fixed dose 600 mg T.Rifampicin, 300 mg T.INH, 800 mg T. Ethambutol, 1200 mg of T. Pyrazinamide , along with oral / local antifungals. Patient is now on regular medication with follow up.

DISCUSSION

The emerging drug resistance of TB combined with an increase in incidence , warrants an increased understanding of the hand of Mycobacterium tuberculosis in atypical or persistant lesions of oral cavity. Tuberculosis is a well known disease entity affecting humans for centuries. Though the prevalence of the disease has decreased ,the disease still persists ; more amongst the developing countries. The possible reasons for this could be HIV infection, increase in poverty, lack of self hygiene and increased number of people living in cramped quarters and to top it off the emergence of drug resistant mycobacteria. Oral mucosa TB is observed only in 0.05 to 5 % of patients with TB(5) and most of these are secondary to primary in the lung.TB can manifest in the oral cavity in the form of ulcers, induration, patches , even affect the jaw bone as osteomyelitis.(3) The most common amongst these is the ulcerative form which mostly doesn't involve the dependent lymph node(3)

Primary oral TB are extremely rare and generally occur in young or immunocompromised conditions like HIV and are associated with painless oral lesions and cervical lymphadenopathy and this form usually affects the buccal mucosal folds and gingiva. There are also reports of focus of inflammation adjacent to teeth or tooth extraction.Oral lesions are rarely primary, they occur mostly secondary to a pulmonary disease. The possible mode of seeding of the bacilli, in the oral mucosa seems to be via the infected sputum, which can enter through a cut or a scrape in the mucosa. Another possibility is the bacteria to be carried via the hematogenous route, get deposited in the submucosa and subsequently erode into the buccal mucosa.(5)

The secondary form is commonly seen among people beyond 40 and it involves the tongue and hard palate. The typical oral TB ulcer has stellate shape, irregular margins, undermined edges, granulating floor and can either be superficial or deep and tends to slowly increase in size .(4) There can be an area of induration surrounding the ulcer, and fissures, granulomas and nodules can be found. The lesions can be single, multiple, painful or painless. In some cases immediate surrounding structures like tongue, salivary glands ,uvula, cervical lymph nodes can also be involved. The rarely affected areas are the retromolar trigone and the alveolar ridge. Diagnosis of TB at such an unusual site is difficult because the lesion can mimic malignancy, cicatricial pemphigoid, syphilis, sarcoidosis, wegeners granulomatosis(5).(Diagnosis is usually clinched by demonstration of Langerhans giant cells and acid fast bacilli on wedge biopsy. The demonstration of AFB is very rare and is only reported in 7.8% in a study (6). In our case , this patient has a buccal mucosa ulcer secondary to a lung lesion and other contributing factors can be chronic alcoholism and poor oral hygiene and recent tooth extraction. And we could also demonstrate the AFB and the Langerhans giant cells. He had improvement of oral excoriation after 4 weeks of treatment with ATT and is now on follow up.

CONCLUSION

Tuberculosis of the oral mucosa is a rare disease and such unusual forms of the disease are mostly misdiagnosed. We would like to bring to notice such unusual presentations of TB so that they are identified and treated adequately in order to prevent the dissemination of TB to other organ systems.

REFERENCES:

1. Global Tuberculosis report 2019. Available from:
https://www.who.int/tb/publications/global_report/tb19_Exec_Sum_12Nov2019.pdf?ua=1
2. Mahajan S, Srikant N, George T. Atypical presentation of oral tuberculosis ulcer. N Y State Dent J. 2007 Nov;73(6):48-50. PMID: 18265771.
3. Khan MN. Oral manifestations of Tuberculosis: The role of the dentist. S. Afr. dent. j. [Internet]. 2015 Nov [cited 2020 Aug 28]; 70(10): 434-435. Available from:
http://www.scielo.org.za/scielo.php?script=sci_arttext&pid=S0011-85162015001000002&lng=en.
4. Kamala R, Sinha A, Srivastava A, Srivastava S. Primary tuberculosis of the oral cavity. Indian J Dent Res. 2011 Nov-Dec;22(6):835-8. doi: 10.4103/0970-9290.94680. PMID: 22484880.
5. Eng HL, Lu SY, Yang CH, Chen WJ. Oral tuberculosis. Oral Surg Oral Med Oral Pathol Oral Radiol Endod 1996;81:415-20
6. Jain P, Jain I. Oral Manifestations of Tuberculosis: Step towards Early Diagnosis. J Clin Diagn Res. 2014 Dec;8(12):ZE18-21. doi: 10.7860/JCDR/2014/10080.5281. Epub 2014 Dec 5. PMID: 25654056; PMCID: PMC4316362.

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