



GLOBAL JOURNAL OF MEDICAL RESEARCH: C
MICROBIOLOGY AND PATHOLOGY
Volume 14 Issue 5 Version 1.0 Year 2014
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4618 & Print ISSN: 0975-5888

Primary Tuberculosis of Tongue; Mimicking as a Malignancy- A Case Report

By Tomar K.P.S , Pandit Vidyanand & Jain Bharat

Jiwaji University, India

Abstract- Though tuberculosis in India is very common but tuberculosis of oral cavity is very rare. It is prevalent as 0.5 to 5% of all cases¹. Integrity of the oral epithelium and inhibitory effect of saliva are considered to be the reason for relative resistance to infection of bacilli,² hence it is low prevalent. Though its a case of primary tuberculosis of tongue giving suspicion of malignancy in an otherwise healthy elder male belonging to low socioeconomic class.

Keywords: *tuberculosis, granuloma, malignancy, ulcer.*

GJMR-C Classification : *NLMC Code: WA 400*



Strictly as per the compliance and regulations of:



© 2014. Tomar K.P.S, Pandit Vidyanand & Jain Bharat. This is a research/review paper, distributed under the terms of the Creative Commons Attribution-Noncommercial 3.0 Unported License (<http://creativecommons.org/licenses/by-nc/3.0/>), permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Primary Tuberculosis of Tongue; Mimicking as a Malignancy-A Case Report

Tomar K.P.S ^α, Pandit Vidyanand ^σ & Jain Bharat ^ρ

Abstract- Though tuberculosis in India is very common but tuberculosis of oral cavity is very rare. It is prevalent as 0.5 to 5% of all cases¹. Integrity of the oral epithelium and inhibitory effect of saliva are considered to be the reason for relative resistance to infection of bacilli,² hence it is low prevalent. Though its a case of primary tuberculosis of tongue giving suspicion of malignancy in an otherwise healthy elder male belonging to low socioeconomic class.

Keywords: tuberculosis, granuloma, malignancy, ulcer.

Abbreviation: HIV-human immunodeficiency virus, ATT-anti tubercular therapy.

I. INTRODUCTION

Tuberculosis of oral cavity is very rare. It is prevalent as 0.5 to 5% of all cases¹. Integrity of the oral epithelium and inhibitory effect of saliva are considered to be the significant reason for relative resistance to infection of bacilli². Out of 8.6 million cases of the world, 2.2 million (25%) cases occurred in India making India as the World's highest tubercular burden country. In July 2011 the revised estimated incidence was 185/lac, prevalence was 285/lac and mortality rate of T.B was 22/lac³. Though extra pulmonary tuberculosis only represents 15% of total cases (in HIV negative patients)⁴. Tuberculosis of oral cavity is an uncommon site for involvement however tongue is the most common site in oral cavity accounts almost half of its cases⁵. Here it is the presentation of a case report of a patient who have only primary tuberculosis of tongue no other systemic tuberculosis involvement & was healthy (not immunocompromised).

II. CASE REPORT

A 52 yr old male came to the department of otorhinolaryngology with the presenting complaints of erosive lesion over tongue with slight difficulty in chewing and speaking, though it was a painless lesion. Patient have a long term history of tobacco chewing approximately for 30yrs. No other relevant complain or history.

On general examination, patient was well build and no complains of cough or fever, both lungs were clear. There were no lymphadenopathy or organomegaly.

Author α σ: Post Graduate Resident, Department of pathology, G.R.M.C, Gwalior, (M.P.) INDIA. e-mail: drkpstomar.2011@gmail.com
Author ρ: Professor & Head, Department of pathology, G.R.M.C, Gwalior, (M.P.) INDIA.

Oral examination shows poor oral hygiene with stained gums and teeth and a erosive lesion over dorsum surface at anterior two third of tongue. FNAC was advised which was inconclusive. Haematological parameters were within normal limits. But due to suspicion of malignancy by surgeon and patients over concern hemiglossectomy was done and resected portion was sent for histopathological examination to the Pathology Department. Histopathological features showed chronic noncaseative granuloma formation with giant cells suggestive of tubercular involvement of tongue.

III. DISCUSSION

Tuberculosis involve almost every organ of body. Although involvement of tongue is a very rare. The first authentic case of this was reported by Portal⁶ in 1804 and Mogargani⁷ in 1761 described patient with tubercles in tongue. Pathogenesis behind this is recurrent contact with sputum or hematological spread. Majority of the cases belongs to the HIV infected peoples or immune compromised patients. Other sites of involvement in oral cavity are floor of mouth, soft palate gingiva lips & hard palate. Its common in middle aged or elder men⁸. These oral tubercular lesions generally develop secondary to pulmonary tuberculosis but occasionally primary involvement is seen in cases with poor oral hygiene and traumatic injury during dental or oral surgical procedures⁹. Titche listed five types of tongue involvement 1.ulcer 2.fissure 3.granuloma 4.tuberculoma 5.glossitis. and ulcer is the most common finding¹⁰. In the present case patient have tubercular granuloma with painless lesion. Treatment of extra pulmonary tuberculosis is comes under category II ATT. First line drugs to be given are rifampicin, isoniazid, ethambutol, pyrazinamide & streptomycin.

IV. CONCLUSION

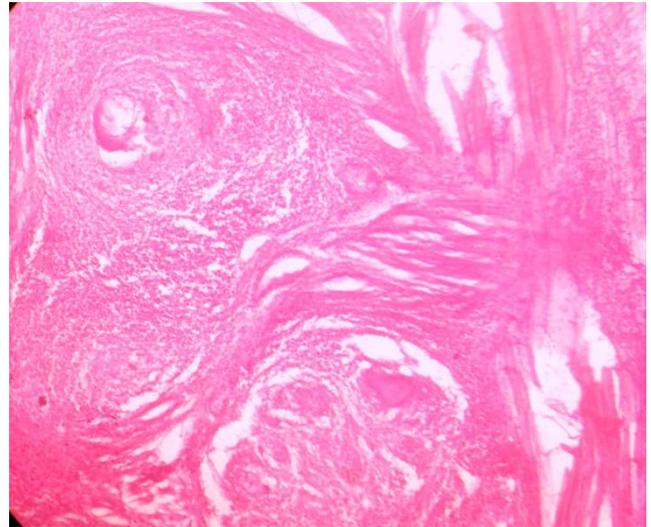
Though it is a very rare presentation of tuberculosis of tongue but clinician should consider always this in a differential diagnosis of the chronic ulcerative lesion of tongue. To rule out this a adequate biopsy from deeper and representative area should be taken before doing hemi or complete resection of tongue. This can avoid unnecessary operative procedure and disability to the patients as treatment with ATT very effective most of the time.

a) *Histopathological Sections*

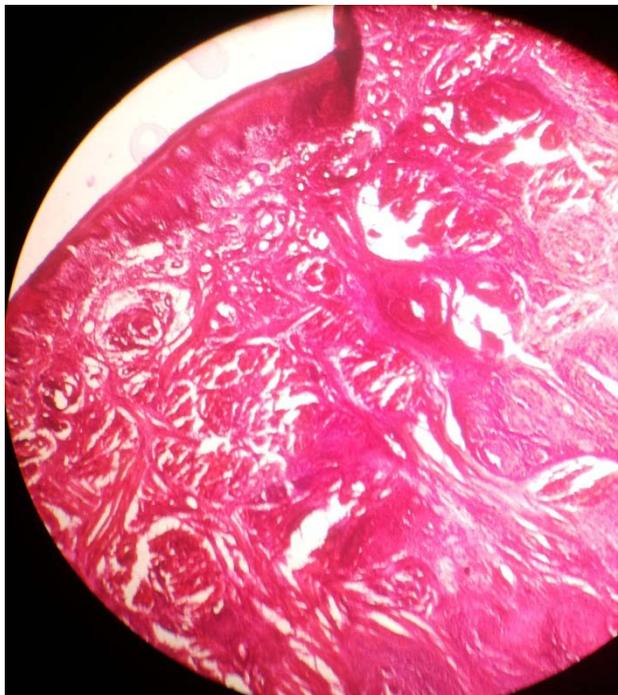
The Histopathological Sections are depicted in following different views of the present case.



scanner view (Tubercular Granuloma)



40x(Tubercular Granuloma)



10x(Tubercular Granuloma)

REFERENCES RÉFÉRENCES REFERENCIAS

1. Mignogna MD, Muzio LLO, Favia G, Ruoppo E, Sammartino G, Zarrelli C et al. Oral tuberculosis: a clinical evaluation of 42 cases, *Oral Dis*, 6:25-30, 2000.
2. Eng HL, Lu SY, Yang CH, Chen WJ: Oral tuberculosis, *Oral Surg Oral Med Oral Pathol Oral Radiol Endod*, 81: 415-420, 1996.
3. WHO 2012, T.B. Control in South East Asia Region, Regional Report 2012.
4. WHO 2012. Tuberculosis Global Fact 2011-12.
5. S.K.Sharma and A Mohan. *Indian journal of med res* 120, oct 2004 pp 316-353.
6. Portal: *course d'antomie paris* 4:527, 1804.
7. Morgagni: *De Sedibus et causismorbora per anatomen indigastis* 1761.
8. Jaya Mehta et al. *Indian journal of otolaryngology and head & neck surge* july –sep 1998 vol 50 issues 3 pp 284-286.
9. Prabhu SR, Sengupta SK: Bacterial infections due to mycobacteria, In Prabhu SR, Wilson DF, Daftary DK, Johnson NW, editors, *Oral Diseases in the Tropics*, (1st ed), Delhi Oxford university press, p.195-202, 1993.
10. Titche I. L.: tuberculosis of the tongue *Am.Rev Tuber ec.* 52-342 oct 1945.