RARE SITE OF PRIMARY TUBERCULOSIS - PHARYNX
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Abstract: Primary tuberculosis of the pharynx is rare, and it accounts for 0.05-5 percentage of total tuberculosis cases. Pharyngeal tuberculosis is usually secondary to pulmonary tuberculosis due to coughing up of infected sputum settling in the oro-pharynx. Here we present a case of primary pharyngeal tuberculosis in a 29 year old male, without pulmonary involvement. Histo-pathological and molecular diagnosis was obtained and the patient was started on short course anti tuberculosis therapy. Thus in high prevalent areas, young patients presenting with ulcer-proliferative growth on the pharynx, a high degree of suspicion for tuberculosis should be considered.

Keyword: primary, tuberculosis, pharynx, geneXpert, sputum negative

INTRODUCTION:
Tuberculosis is a highly infectious disease, which is caused by Mycobacterium tuberculosis bacilli. In developing countries, it is still one of the leading causes of morbidity and mortality. The disease mainly manifests as pulmonary form. Extra pulmonary infection involving lymph nodes, central nervous system, abdomen, genitourinary tract, bones and joints, and pleura are also seen. Primary tuberculosis of the pharynx is rare, and it accounts for 0.05-5% (1,2) of total tuberculosis cases. Pharyngeal tuberculosis is usually secondary to pulmonary tuberculosis due to coughing up of infected sputum settling in the oropharynx. Saliva, containing saprophytes with phagocytic property and epithelium of oral cavity, inhibit growth and multiplication of tuberculosis bacilli. (3) Any breach in the mucosa due to chronic irritation or inflammation, poor dental hygiene, leukoplakia and dental extraction can predispose. (4) Even if there is no breach in mucosa, mycobacterium tuberculosis cross mucosal barriers by endocytosis within mucosal lympho-epithelial sites of oropharyngeal and nasopharyngeal tonsils and Peyer’s patches. (5) Bacilli discharged at basolateral surfaces of engulfing epithelial M cells are taken up by professional APC along with T lymphocytes of parafollicular area. Dendritic cells and macrophages allow mycobacterial replication, due to permissive immunological environment in lympho-epithelial tissues. Phagocytes containing intracellular mycobacteria disseminate infection and also migrate back onto mucosal surface to shed bacilli.

CASE REPORT
A 29 year old male, a chronic smoker and alcoholic came to our out patient department with complaints of odyno-phagia, dysphagia, loss of appetite and weight, cough and fever for 3 months duration. He denied any prior history of anti tuberculosis therapy. The patient was moderately built and nourished, mildly anemic and had palpable left upper deep cervical lymph nodes. Skiagram of chest was normal. We saw a granular lesion on posterior pharyngeal wall which was red in colour and proceeded with a biopsy for histo-pathological confirmation that showed granulomatous inflammation.

Sputum for Acid fast bacillus was negative. Then we proceeded with fibre-optic bronchoscopy to look for the extent of the disease. We found thick caseous cheesy material from posterior pharyngeal wall and aspirated it for geneXpert- that turned out to be MTB DETECTED , and RIFAMPICIN SENSITIVE. Patient was started on short course chemotherapy (2HRZE/4HR).

DISCUSSION:
Tubercular manifestation in the oropharynx is uncommon. The most common sub-site of involvement in the oral cavity is the tongue and in the oropharynx it is the tonsils followed by soft
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palate, and oropharyngeal wall. [6,7] In our case, the patient presented with an extensive involvement of the oropharynx with nodal enlargement and poor performance status. Lesions of primary oropharyngeal and oral tuberculosis generally occur in younger age groups.[8] It has been reported in the literature that pediatric age group is more commonly involved.[9-11] Our patient was a male of 29 years of age. The tubercular lesion in our patient mimicked that of a malignant lesion. Tuberculosis of the oropharynx usually occurs secondary to pulmonary tuberculosis due to coughing up of infected sputum settling in the oropharynx.[12] Our case had no radiological evidence of pulmonary tuberculosis and also, the patient was negative for AFB on sputum examination. Oropharyngeal tuberculosis has been reported in immunocompetent individuals,[13] like in our case who was serologically nonreactive for HIV. In head and neck lesions of tuberculosis, malignancy may co-exist,[14] so a careful tissue diagnosis should be done to exclude a co-existing carcinoma. In our case, multiple tissue biopsies did not reveal any features of malignancy in the oropharynx.

**Conclusion**

In high prevalent areas, young patients presenting with ulcer-proliferative growth on the pharynx, a high degree of suspicion for tuberculosis should be considered. Diagnosis needs to be confirmed by histo-pathological examination, including exclusion of the pulmonary involvement by radiological examination and sputum examination for AFB.

**References**
