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CLINICAL REPORT

Primary Tuberculosis of Tonsil Mimicking Carcinoma Tonsil

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Abstract Tuberculosis is one of the major causes of ill health and death worldwide. Primary tuberculosis of the oral cavity and oropharynx is usually uncommon. Among tuberculosis of oral cavity and oropharynx, primary tuberculosis of tonsil in the absence of active pulmonary tuberculosis is a very rare clinical entity which presents difficulties in diagnosis because of similarity of presentation of carcinoma tonsil. Diagnosis mainly relies on the treating surgeon having a high index of suspicion. Although rare, tuberculosis should be kept in mind and considered in the differential diagnosis of any patient presenting with ulcer over tonsil.

Keywords Tuberculosis · Neck · Lymphnode · Histopathology · Carcinoma

Introduction

Tuberculosis is one of the major causes of ill health and death worldwide. Primary tuberculosis of the oral cavity and oropharynx is usually uncommon. Among tuberculosis of oral cavity and oropharynx, primary tuberculosis of tonsil in the absence of active pulmonary tuberculosis is a very rare clinical entity [1, 2]. We report a case of primary tonsillar tuberculosis, in a middle aged male, mimicking malignancy.

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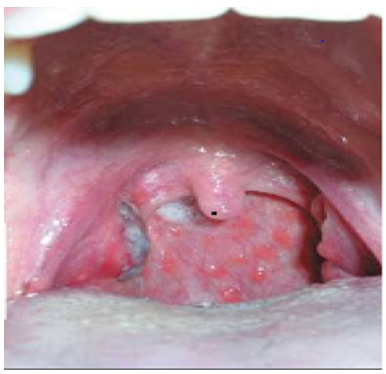
Case Report

A 51 year old male with complaints of hard swelling in upper neck right side 1 month duration, insidious onset, gradually progressive, associated with pain and tender to touch. No history of fever. Patient also has complaints of throat pain, more with swallowing both for solids and liquids. Patient also complaints of weight loss and loss of appetite. No history of cough or breathlessness. No significant history in the past. Patient is non-diabetic and no hypertension.

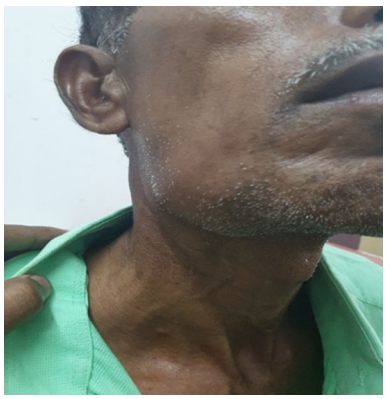
On Examination

Ear and nose examination was normal.

Oral cavity examination showed poor dental hygiene. Oropharynx examination showed alarge ulcer measuring 2 × 2 cm, on right side tonsil extending up to anterior pillar with slough covered base, undermined edges and smooth margin. Ulcer on palpation was bleeding to touch and indurated.

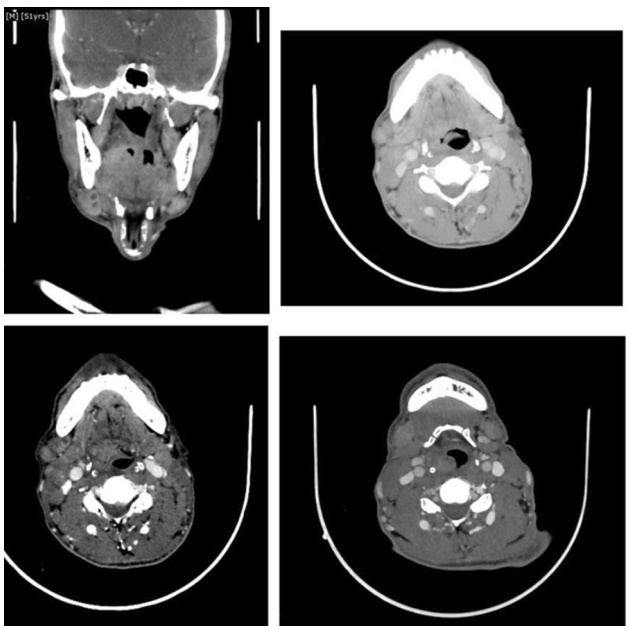


Neck examination revealed a large smooth swelling below right side mandible 3 × 3 cm, hard to firm in consistency, warm to touch, tender on palpation, smooth swelling with no lobulations. Skin over swelling normal in colour and texture, with no sinuses or fistulas. A differential diagnosis was made as malignancy tonsil, granulomatous lesions of tonsil.

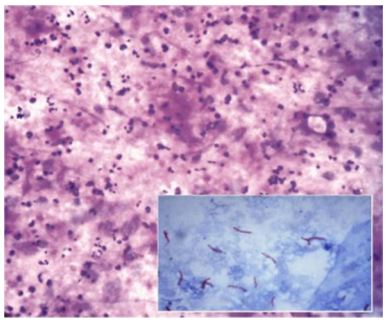


Investigations

All baseline blood investigations were done. ESR was high with all other blood parameters being normal. CECT neck showed finding of ill-defined heterogeneous soft tissue density lesion involving right pyriform sinus, right vallecula and extending superiorly uptotonsillar fossa displacing epiglottis, uvula contra laterally and narrowing laryngeal lumen measuring 5 × 1.6 × 1.8 cm in dimension. Patient underwent biopsy of the ulcer on right side tonsil. Specimen sent for histopathological examination which revealed chronic granulomatous tonsillitis with neutrophilic infiltration suggested Koch's aetiology.



Special stain for AFB highlighted many acid fast bacilli. Fine needle aspiration was done for swelling on right side upper neck and sent for HPE which showed acid fast bacilli with Langerhans giant cells, histiocytes and granulomas with haemorragic background. Gene expert for TB was also done, which was quantitatively high.



Treatment

Patient was diagnosed to have Primary tuberculosis of tonsil with lymphadenopathy and was started on Anti-tuberculous treatment. After 3 weeks Patient improved and weight gain was seen. Ulcer over tonsil reduced in size. Pain and tenderness over lymphnode reduced and patient was free from throat pain.

Discussion

Extrapulmonary tuberculosis (TB) represents approximately 25% of overall tubercular morbidity [3]. Among extra pulmonary tuberculosis (EPTB), most common is lymph node tuberculosis while other forms are pleural tuberculosis, skeletal tuberculosis, CNS tuberculosis, abdominal tuberculosis, genitourinary tuberculosis, and miliary tuberculosis, tubercular pericarditis is also seen.

Tuberculosis of the oral cavity is uncommon and lesions may be either primary or secondary. Tongue and palate are the common sites whereas tonsillar tuberculosis is a rare localization with an incidence of less than 5% [4]. Tuberculosis of the tonsil can result from infection by contact with material containing tubercle bacilli. Tonsillar TB commonly presents with sore throat and cervical lymphadenopathy.

Miller [5] in 1963 concluded that with the advent of pasteurized milk the incidence of tuberculosis came down still further. Tonsil is made up of lymphoid tissue and is situated at a site which is frequently in contact with infected sputum. Still tuberculous infection of tonsil is a rarity because of the antiseptic and cleansing action of

saliva, inherent resistance of tonsil to tuberculous infection, presence of saprophytes in the oral cavity making colonization difficult and the thick protective stratified squamous epithelial covering over tonsil [6].

Although tuberculosis of tonsil is now an uncommon finding, tonsillar granulomata are commonly seen in patients with poor host reaction due to alcoholism, HIV infection, and so forth. Predisposing factors for primary oral tuberculosis include poor dental hygiene, dental extraction, periodontitis, and leucoplakia. It has been postulated that such infections are acquired by inhalation, with harbouring of disease in Waldeyer's ring. Differential diagnosis of oral and pharyngeal tuberculosis includes traumatic ulcers, aphthous ulcers, hematological disorders, actinomycosis, syphilis, midline granuloma, Wegner's disease, and malignancy [7]. Diagnosis of tonsillar tuberculosis is based on histopathological findings and the identification of tubercle bacilli. Treatment is in the form of antituberculosis therapy.

Conclusion

Tuberculosis of tonsil is a rare entity which presents difficulties in diagnosis because of similarity of presentation of carcinoma tonsil. Diagnosis mainly relies on the treating surgeon having a high index of suspicion. Although rare, tuberculosis should be kept in mind and considered in the differential diagnosis of any patient presenting with ulcer over tonsil.

Compliance with Ethical Standards

Conflict of interest The authors declare that there is no conflict of interests.

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