

A rare case of parotid tuberculosis masquerading parotitis

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Abstract

Parotid gland tuberculosis is one of the most uncommon manifestation of one of the most common infections even in the developing countries like India. It can present as parotitis or slow growing lesion as such there is no specific sign and symptoms for the same. The literature search has revealed around 100 cases been reported worldwide with this disease and even much lesser in pediatric age group and the first case of parotid gland tuberculosis was reported in 1893 by C De Pauli.⁽¹⁾ We report a case of Parotid tuberculosis in a 5 year old male child presented with left preauricular swelling of 14 days who did not respond to 10 days of antibiotic and was finally diagnosed as Parotid tuberculosis based on Fine needle aspiration cytology. This child was started on antituberculous drug and responded well. Presently he is under follow up in OPD.

Keywords: Parotid, Tuberculosis, Parotitis

Introduction

The parotid gland is one of the important salivary gland and are relatively resistant to the infection by Mycobacterium tuberculosis because of thiocyanates and proteolytic enzymes, and continuous flow of saliva hampering the growth of the bacteria. The parotid gland tuberculosis can present as intraglandular lymph node or involvement of parotid gland parenchyma which is rare.^(2,3) The various route of transmission can be haematogenous, lymphatic, or autoinoculation with infected sputum. Tuberculosis of the parotid gland can present as diagnostic dilemma for the clinician as it can mimic parotitis or tumour so one has to maintain very high index of suspicion.

Case Details

A 5 year old male child presented with swelling on left preauricular region of 2 week duration. Initially the swelling was around the size of 1.5x 1.5 cm associated with pain on chewing. It has increased in size for last 2 week to 3.5x 3.5 cm for which the parents consulted the doctor. There was no history of fever, loss of weight, other swelling in neck, cough, haemoptysis, breathlessness. There was no history of contact with tuberculosis patient. There was no significant past history. The birth and perinatal history was uneventful. He was immunized for age and nutritionally well child. The clinical evaluation revealed weight of 18kg (25- 50 centile) and height of 110cm (25 centile). The vital parameters were normal for age. There was 3cm x 3cm swelling on left preauricular region which was firm and mildly tender (Fig. 1, 2). There was no other significant lymphadeopathy in neck/ axilla and inguinal region. The systemic examination was essentially normal. There was no peripheral sign of tuberculosis. Based on the clinical finding possibility of parotitis was kept and antibiotic was started, however child did not respond

in spite of 10days of oral antibiotic and investigations were done. The investigation revealed Hb: 12.5gm% TLC: 9300/cmm DLC: P45, L40, E10 M5, Platelets: 2.6 lacs CRP- neg, ESR- 16 mm fall in 1st hr MP smear: -ve Urine RE/ME: normal BUN/creatinine -12/0.6 LFT with enzymes -0.6/40/26/324, Na/ K/Cl -132/3.4/102, HIV -ve, CXR normal, Mountox Neg, gastric aspirate was negative for TB bacilli, USG neck and parotid s/o enlarged parotid gland on left side with size measuring 4.5x 4.5 cm with central necrosis, FNAC done revealed multiple acid fast bacilli seen in the aspirated material clinching the diagnosis of parotid tuberculosis. The gene xpert TB RIF assay was negative. The child was started on anti tubercular drug 2HRZE+ 4HR along with Pyridoxine. The child showed improvement and is under follow in the OPD.



Fig. 1



Fig. 2

Fig. 1, 2: Showing parotid gland swelling around 3x3 cm

Discussion

Tuberculosis has been a major cause of morbidity and mortality since time immemorial which can affect both pulmonary and extra pulmonary organs like lymph node, bone, skin, meninges, and abdomen but the involvement of parotid gland is extremely rare and much more in pediatric age group.^(4,5) The source of infection in parotid tuberculosis is controversial. There are different postulations on the source of infection in parotid tuberculosis. Extension of infection along Stenson's duct from the oropharynx and vascular mode of spread from primary focus in the body or through wounded oral mucosa are some of the postulations.⁽⁶⁾ It most commonly presents as a localized mass, resulting from infection of intra-capsular or peri-capsular lymph nodes. It may also present as an acute sialadenitis with diffuse gland enlargement or even as a peri-auricular fistula or an abscess.⁽⁷⁾ A case of a parotid swelling is a diagnostic dilemma since we have to differentiate between a parotitis/ neoplasm and an infective lesion like tuberculosis. We can diagnose parotid tuberculosis by maintaining high index of suspicion and confirming it by Fine needle aspiration cytology (FNAC) which has high sensitivity and specificity in diagnosis of tuberculosis. Specificity can further be increased by doing ZN staining of the fine needle aspirate. The biopsy is only opted when the FNAC is inconclusive as it carries the risk of facial nerve injury.

Conclusion

This case report highlights how a parotid tuberculosis can masquerade benign condition like parotitis. We should maintain high index of suspicion for tuberculosis while investigating a case of parotid swelling, so that we may be able to avoid parotidectomy with its potential complications.

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