PRIMARY TUBERCULAR PAROTITIS

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ABSTRACT

This is a case report of a 50 years old female who was diagnosed as primary tubercular parotitis. The clinical presentation was similar to that of a parotid neoplasm. She was treated with anti tubercular therapy.Tubercular parotitis is a very rare entity even in the countries where tuberculosis is highly prevelant. The presentation being similar to a neoplasm may bring about diagnostic dilemma and the patient may have to undergo unnecessary surgery. So in cases where we encounter a chronic parotid swelling, we have to be highly suspicious in diagnosing and a thorough workup in the line of tuberculosis has to be done even in the absence of clinically evident foci of tuberculosis elsewhere. Ultrasonography (USG) and Fine Needle Aspiration Cytology (FNAC) prove to be very useful in diagnosing such cases and these cases are better treated medically.

KEYWORDS: Tuberculosis; Parotitis; Lymphadenitis

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INTRODUCTION

Tuberculosis (TB) is still one of the most frequently occurring infectious diseases worldwide. According to the World Health Organization (WHO), approximately one third of the world's population is infected with tubercle bacilli. Eight million new cases of the active disease develop each year and three million people die from it.[1] Peripheral lymphadenitis is seen in nearly 35% of extra pulmonary tuberculosis (TB) which constituted about 15-20% of all cases of TB. Cervical lymph nodes are the most common site of involvement and reported in 60-90% of patients with or without involvement of other lymphoid tissue.[2] Within the neck certain lymph node groups are more frequently involved than others, with a predilection for nodes in the posterior triangle (51%) and deep upper cervical (48%). In the majority of cases lymphadenitis is unilateral.[3]

Tubercular parotitis is extremely rare, even in the indian subcontinent, where the disease is rampant. Clinically, it presents as a slow-growing localized mass, indistinguishable from a neoplasm.[4] If there is no history of pulmonary tuberculosis and no relevant symptoms, diagnosis can be extremely difficult. We hereby report a case of tubercular parotitis presenting as a parotid mass which we initially mistook for a parotid tumour based on clinical examination.

CASE REPORT

A 50 years old female patient presented with a two month history of swelling in the right infra-auricular region that was gradually progressive and extended to involve the right parotid region and right submandibular region. The swelling grew painful since last 15 days, which was not triggered on chewing and subsided on taking medications. She gave a history of non-productive cough since 2 months. There was no history of fever or weight loss. There was no past or family history of tuberculosis. She was not immuno compromised.
Local examination revealed a 11×11cm, firm, matted swelling extending from the right parotid region to the right submandibular region that was slightly tender and the overlying skin was free and not warm (fig. 1, 2 and 3). No discharge from the Stenson's duct was seen on pressing the swelling. Oral cavity, oropharynx, temporomandibular joints, ear were normal. Other cervical lymph nodes as well as axillary and inguinal lymph nodes were not palpable. General examination was not significant. Results of routine lab investigations were within normal limits and chest radiograph showed no abnormality. USG neck showed evidence of multiple conglomerate large necrotic lymphadenopathy noted in right preauricular, submandibular and cervical region. FNAC yielded blood mixed aspirate. Microscopic examination revealed predominant areas of epitheloid cell granulomas, scattered multinucleated giant cells and occasional areas of necrosis in the background of lymphoglandular tissue (necrotizing granulomatous lymphadenitis) suggestive of tubercular origin. Patient was put on anti-tubercular therapy which resulted in resolution of swelling with clinical improvement.

Figure: 1,2,3 Right parotid swelling extending to submandibular region

DISCUSSION

Extrapulmonary TB is more common in children, women and minorities. While the primary site of infection in TB is the lungs, in upto 15% of cases an extrapulmonary site may produce the first symptoms.[5] Tuberculous parotitis accounts for 2.5% to 10% of parotid pathologies.[6] Till recently, fewer than 100 cases have been reported in the literature.[7] There are two pathological forms of tuberculous parotitis, the common localized form is due to involvement of intraglandular /periglandular lymph nodes, while the rare diffuse form involving parenchyma may be secondary to the nodal infection.[7] In our case, it was the first mentioned form. Involvement of the parotid gland and lymph nodes may develop in two ways. First, a focus of mycobacterial infection in the oral cavity liberates the mycobacterium that ascends into the salivary gland via its duct or passes to its associated lymph nodes via lymphatic drainage. The second pathway involves haematogeneous or lymphatic spread from a distant primary lung focus.[8] The two clinical forms of tuberculous parotitis are, acute tuberculous sialadenitis, which presents with diffuse glandular enlargement; and chronic sialadenitis, which manifests itself as an asymptomatic localized lesion within the parotid gland, slowly growing in size for many years.[8] Ultrasound is an excellent first line investigation, as it is not only able to assess cervical lymphadenopathy but also enables guided fine needle aspiration cytology. The

combination of grey-scale imaging and FNAC as a sensitivity of 92% and specificity 97% in distinguishing benign from malignant nodal disease.[9] In parotid lesions FNAC has a sensitivity of 81-100% and specifity of 94-100%.[6] The patient did not have any clinically detectable foci of tuberculosis elsewhere, so following USG and FNAC findings, we established our final diagnosis as primary tubercular lymphadenitis. Treatment of choice is anti-tubercular drug therapy. Surgeries in these cases may lead to complications like cutaneous fistula formation or facial nerve palsy. A category I regimen (2HRZE+6HE) according to the national tuberculosis centre protocol is recommended as initial therapy for all forms of extrapulmonary TB, unless the organisms are known or strongly suspected to be resistant to first-line drugs.[10]

CONCLUSION

Tubercular parotitis though being an uncommon entity should always be ruled out in cases of chronic parotid swelling. Differential diagnosis may be sarcoidosis or a neoplasm. USG and FNAC helps us to rule them out and easily establish the diagnosis even if the patient has no clinically evident signs of tuberculosis .

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