

# Tuberculosis Of Parotid Gland: A Rare Differential Diagnosis Of Parotid Tumor

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## Abstract

Mycobacterial infection of the parotid gland is rare. But recently there is reemergence of tuberculosis in Malaysia. These patients usually presented with swelling in parotid region without much specific symptoms of tuberculosis. Only with high index of suspicion with preoperative investigations like fine needle aspiration cytology, the surgery and risk of facial nerve paralysis can be avoided.

## CASE REPORT

57 year old Malay female was presented to our otorhinolaryngology clinic with a history of right preauricular swelling of 2 months duration. There was no history of fever, malaise, loss of weight or appetite. There was no history of cough with haemoptysis. The swelling was occasionally painful. There was no family history suggestive of tuberculosis. On clinical examination the right parotid swelling was about 4x3 cm size and mobile. The skin over the swelling was hyperemic. Both ears were normal. Intra oral examination no abnormalities noted. Other otorhinolaryngological examination was normal. Facial Nerve function was normal. Hence Fine needle aspiration cytology was done which showed it was on epitheloid granuloma (Fig 1) and Zeil-Neilson stain (Fig 2) showed presence of acid fast bacilli. A diagnosis of tuberculosis was made and the patient was treated with antituberculosis therapy with help of a chest physician. At follow-up after one year, swelling subsided well, skin appears normal.

## DISCUSSION

Tuberculosis is common in Asian or African countries. The diagnosis of tuberculosis must always be entertained in a patient with parotid swelling, especially in those that have past history of tuberculosis.<sup>3</sup> In most cases the history of parotid swelling is shorter than 6 months. Mycobacterial infection of the parotid gland is rare even in those countries where the disease is otherwise common.<sup>2</sup> In most patients, tuberculosis presents as a solid mass corresponding to the infection of a parotid lymph node. In some cases a diffuse infection of the whole gland has been described. It is thought

that the parotid gland tuberculosis possibly occurs by two different modes of development. Firstly, It may begin as an infection of the teeth to sialar tissue or by auto inoculation with infected sputum which reaches the parenchyma and lymphatics of parotid gland by afferent lymphatic or by ducts.<sup>1</sup> Secondly the parotid gland may be infected by metastases from lungs by haematogenous or lymphatic route (Stanly et al., 1983; Chaudhary, 1997)

Usually it is very difficult to distinguish tuberculosis from swelling of parotid gland due to other causes by clinical or radiological investigations. The sensitivity of FNAC has been found to be 80% while the specificity is 93 percent (Dandabati et al 1990). However the histopathological examination of the specimen remains the definitive diagnostic test. But with diagnosis by fine needle aspiration cytology is possible if well trained cytopathologist available. Hence fine needle aspiration cytology is a viable mode of preliminary investigation before subjecting the patient for surgery. We can eliminate the risk of facial nerve paralysis also at the same time. Because the treatment of tuberculosis is medical while that of majority of the tumor whether benign or malignant is surgical.

The above patient even though presented with solid mass with occasional pain, fine needle aspiration cytology really guides the surgeon properly to manage medically.

## CONCLUSION

Although tuberculosis of parotid gland is rare, it still exists and it is one of the rare differential diagnosis of parotid tumor. Fine needle aspiration cytology is simple easy to

perform and diagnosis is not difficult with availability of Cytopathologist. Hence FNAC should be considered as a tool for diagnosis before subjecting for surgical intervention.

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