

Case Report

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Bilobe parotid lipoma: a rare case report of parotid involving both the superficial and deep lobe with review of literature

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ABSTRACT

Lipomas are common benign soft tissue tumours, they are found in every body part where the fat is normally present but they are rarely found in the head and neck region. There are few reports of parotid lipoma and till date only one case report of bilobe lipoma has been reported earlier. They compromise 0.6%-4.4% of all parotid tumour. A 60 year old male presented with a large swelling in left parotid region extending from left pre-auricular region to submandibular region from 6 years. Examination of the facial nerve was normal. Ultrasound of the region suggested of lipoma. Fine needle aspiration cytology was done which supported the ultrasound diagnosis. Patient underwent tumour excision with facial nerve preservation. Lipoma of size 10 x 8 cm which is the largest reported bilobe parotid lipoma reported till date. Literature review has suggested lipomas of parotid region are rare hence should be kept in one of the differential diagnosis. Surgical intervention is challenging because of the probability of injuring the facial nerve, thus knowledge of the anatomy and meticulous surgical technique is essential.

Keywords: Parotid swelling, Lipoma, Parotid gland tumour, Non-malignant tumour

INTRODUCTION

A lipoma is always a benign tumour made up of fat tissue. The typical lipoma is a soft, rubbery, non-painful lump located in the subcutaneous tissues.¹ Lipomas are the most common soft-tissue tumour in adults which can usually occur more often in men than women. Aetiology of lipomas is unknown, some sub-types appear to have a genetic effect (conventional lipomas, spindle cell lipomas, pleomorphic lipomas), and may be inherited from family members. While solitary lipomas are more common in women, multiple tumours (referred to as lipomatosis) are more common in men.² Lipomas can occur at any age, but they are most often discovered between the ages of 40–60 years.³ On the other hand, congenital lipomas have been observed in children.⁴ Lipoma most often is found on the upper back, shoulders, arms, buttocks, and upper thighs.

Less commonly, it can be found in deeper tissues in the thigh, shoulder or calf. The prevalence of lipoma is approximately 1% of the general population.⁵ About thirteen percent of all lipomas are located in the head and neck region.⁶ Most of these occur subcutaneously in the posterior neck.⁷ Rarely, they can develop in the parotid gland with reported incidence ranging from 0.6%-4.4% among parotid tumours, and they appear most frequently in the fifth and sixth decades of life with a definite male predominance.⁸ It often takes longer to notice lipomas located in deeper tissues, so these tumours can be quite large when they are discovered. Lipomas involving the both lobe of parotid gland are extremely rare and till date one case report has been reported.⁹ Similar to lipomas in other parts of body, they tend to grow insidiously and have few symptoms other than the effect of localized mass or cosmetic concerns. Conservative follow-up can be a valid option for patients with deep parotid lipomas,

since lipomas can now be confidently recognized. Surgical intervention in these cases is challenging and may be reserved for patients with cosmetic or pressure effects.

CASE REPORT

A 60 year old male came to our OPD with a large slow growing, non-tender, asymptomatic, and soft mass, present over left parotid area from past 6 years.

The facial nerve function was intact with the head and neck examination was unremarkable. His routine investigations were normal. Ultrasound of the swelling was done suggested of large lipoma extending from left pre-auricular region to left submandibular region. Because of the huge size of lipoma and to see the proximity of mass to great vessels of neck colour Doppler of the swelling was done suggestive of soft tissue lipoma extending from left pre auricular region to submandibular region with abnormal internal vascularity with compression effect over the left internal jugular vein.



Figure 1: Lipoma seen in between the two lobes of parotid gland.

Tissue diagnosis in form of fine needle aspiration cytology was done to confirm our diagnosis which was suggestive of Mature Lipoma along with spindle cells with acinic cell Hyperplasia, with no evidence of malignant cells. With the diagnosis, elective surgery was planned and a classic parotidectomy incision was made extending up to left sub mandibular region.



Figure 2: Excised lipoma from parotid gland.

The lipoma was identified which was present in between both the lobe of left parotid gland and extending from left pre auricular region to left submandibular region. Lipoma was successfully enucleated after full exposure with preservation of facial nerve. The resected surgical specimen was sent for histopathology which reported the specimen as lipoma of size 10x8cm (Figure 1 and 2). This is the largest bilobe parotid lipoma reported till date. The patient experienced an uneventful recovery, with an intact facial nerve function.

DISCUSSION

Lipoma of the parotid gland is rare finding and usually is not considered in the differential diagnosis of parotid swelling. Lipoma of the superficial parotid lobe is frequently reported, but bilobe parotid lipoma is extremely rare and only one is reported in the world literature till date.⁹ Facial paralysis and pain in the presence of parotid lipoma are uncommon signs and symptoms and have been described rarely.¹⁰ Clinically diagnosis of a parotid lipoma is difficult. Like in our case, usually they appear as a slow growing, non-tender, mobile and well differentiated soft mass in parotid region. FNAC has great value in the diagnosis of parotid tumors.¹¹ But its accuracy drops to less than 50% in the cases of parotid gland lipomas.¹² On CT scans, lipomas have the typical characteristics of homogeneous masses with few septations, a specific range of CT Hounsfield Unit (usually between 50 and 150 HU), and they have no contrast enhancement. MRI can accurately diagnose lipomas by comparison of signal intensity on T1 and T2 weighted images.^{13,14} Also, the margin of a lipoma is clearly defined by MRI as a 'black rim', enabling lipomas to be distinguished from surrounding adipose tissue, a distinction that cannot be made from CT images.¹⁵ Comparing the MRI and CT scan in diagnosis of parotid lipoma, the computed tomography (CT) scan is an accurate and cost effective preoperative diagnostic method.

Surgical management of deep lobe lipoma may be challenging and should be performed by experienced surgeons because of the need for meticulous dissection of the facial nerve branches. The postoperative aesthetic and functional results should be the major concerns. Most surgeons suggest a formal superficial parotidectomy with full exposure of the facial nerve and its branches for deep parotid lobe lipoma.¹⁶ Recurrence rate of parotid lipoma is very low, as it is reported as 5% in all lipoma cases when it is usually well-encapsulated.

CONCLUSION

Literature review has suggested lipoma of parotid region are rare hence should be kept in one of the differential diagnosis. Surgical intervention is challenging because of the probability of injuring the facial nerve, thus knowledge of the anatomy and meticulous surgical techniques are essential.

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