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Case Report

A rare case report of dual swellings in the head and neck region in a male diagnosed as a right infra-auricular keratin cyst with right supraclavicular lipoma

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ABSTRACT

Benign neck swellings are commonly seen in adults as congenital swelling or acquired. But this case report documents the first case of two benign swellings on the same side of the neck in a male especially supraclavicular lipoma with no symptoms other than swelling. A 42-year-old male patient presented to our ENT out-patient department with one painless swelling below the right ear and another on the right side of the neck since the age of 23 years with no other specific complaints. The patient was planned for the fine needle aspiration and imaging studies which showed branchial cyst and lipoma respectively. Post-operative specimen showed a keratin cyst of the right infra-auricular area swelling and lipoma of the right Supraclavicular area swelling and the patient was followed up for 2 years with no recurrence. Our case of dual swellings with different etiopathogenesis on the same side in the head and neck region is being reported for the first time in the literature. This case report aids surgeons to plan for the complete excision with minimal complications as the swelling is close to the great vessels.

Keywords: Supraclavicular lipoma, Keratin cyst, Dual swellings, Excision biopsy, Pultaceous mass

INTRODUCTION

Neck swellings can be congenital or acquired, from simple cysts to malignant lesions. Benign neck swellings can occur in any age group with symptoms or can be asymptomatic. Out of which most commonly occurring benign cyst is epidermoid cyst (77%) occurring in the head and neck region. Epidermoid cyst, which is benign derived from the upper portion of the hair follicle encapsulated with a thin layer of epidermis like epithelium.[1] They typically are filled with keratin and lipid rich debri.[2] Lipomas are more common on the posterior aspect of neck, shoulder or upper back but very rarely seen in the anterior part of neck that too in the supraclavicular region. There is marked male predominance especially in the late 60s explained by androgen receptors reactivity.[3] Our case report documents the first case in the literature till now with two benign neck swellings occurring on the same side in a male which was confirmed in the post-operative excision biopsy specimen. Supraclavicular lipomas are one of the rare conditions now noticed.

CASE REPORT

A 42-year-old male patient presented to ENT outpatient department with complaints of two neck swellings one below the right ear and other on the right side of neck since age of 23 years with no symptoms. He adds to

history that he had some surgical intervention done to swelling below right ear 2 years back.

On examination, the patient was comfortable with no respiratory distress. On ENT examination, there were two swellings one on the right infra-auricular region of approximately 3×5 cm, soft fluctuant with skin involvement and a scar (suggesting previous procedure), and the other over the right supraclavicular region of size approximately 8×5 cm, soft in consistency with minimal mobility as shown in Figure 1. Radiological (Contrast-enhanced computed tomography) imaging was done to see the extent of the lesion. It showed an 8.4×5.5×8.3 cm sized well-defined subcutaneous fat density lesion of average HU value-110 noted in the right lower side of the neck near the medial end of the clavicle. Medially seen abutting the sternocleidomastoid muscle and internal jugular vein, laterally abutting the trapezius. Inferiorly seen abutting the scalene muscles and medical end of clavicle. No calcific changes noted within likely suggestive of lipoma. A 4.3×2.9×4.5 cm sized well defined peripherally mildly hyperdense cystic lesion is noted in the infra-auricular region abutting the right parotid gland with loss of fat planes with parotid likely suggestive of 1st branchial cleft cyst. Bilateral parotid glands bulky Figure 2 and 3. Fine needle aspiration cytology was suggestive of lipoma and sebaceous cyst respectively. The patient was planned for an excision biopsy with written informed consent about the complications before surgery. The patient underwent an excision biopsy of both swellings under general anesthesia. Right supraclavicular swelling was dissected up to the fascia of the brachial plexus and was removed and the wound was closed in layers. Postop period was uneventful. Postop specimen showed right infra-auricular swelling as a keratin cyst and right Supraclavicular swelling as lipoma as shown in Figures 4 and 5. The patient was followed up for 2 years with no recurrence.

Figure 1: Clinical picture of an adult male.
Showing dual swellings-one in the right infra-auricular region and the other in the right supraclavicular region.

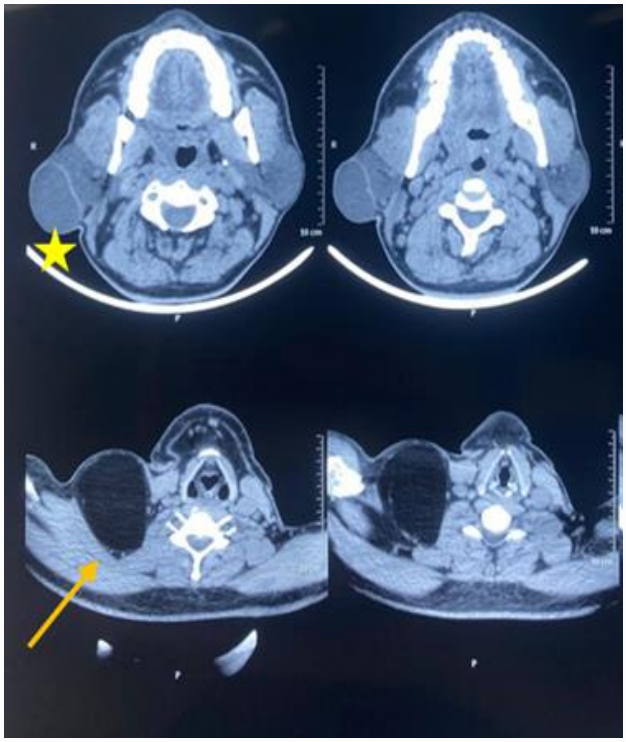

Figure 2: Contrast enhanced computed tomography image-axial sections.
Showing well defined cystic lesion in the right infra-auricular region (star marked) and a large well-defined subcutaneous fat density lesion in the right lower side of the neck near the medial end of the clavicle (arrow marked).

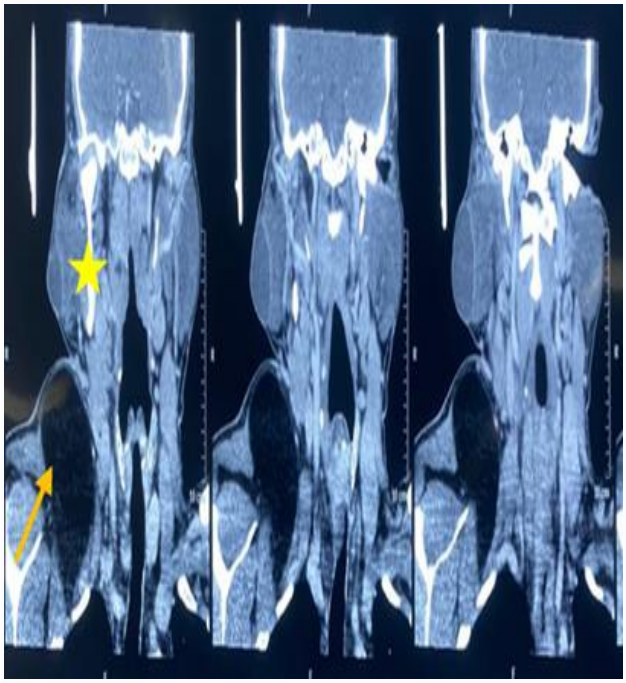

Figure 3: Contrast enhanced computed tomography image- coronal sections.
Showing well defined cystic lesion in the right infra-auricular region (star marked) and a large well-defined subcutaneous fat density lesion in the right lower side of the neck near the medial end of the clavicle (arrow marked).

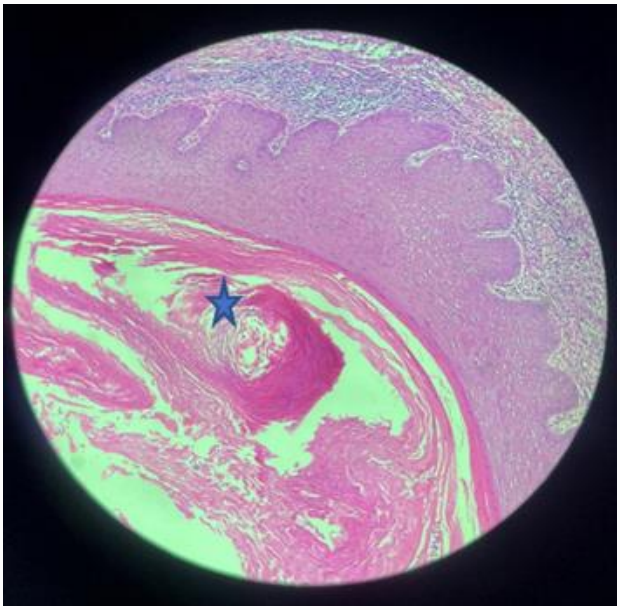

Figure 4: Post operative histopathological image-keratin cyst.

The histopathological image of the right infra-auricular swelling post excision biopsy showing an epithelial cyst containing keratin (star marked) suggesting keratin cyst.

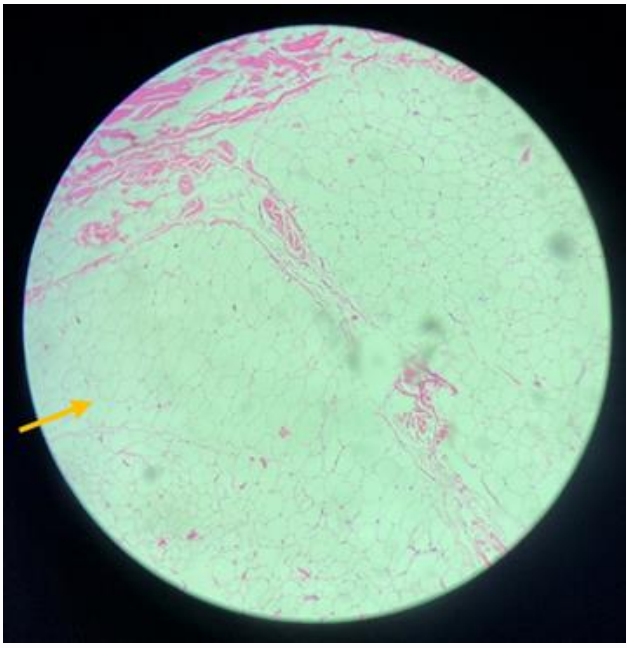

Figure 5: Post operative histopathological image-lipoma.

The histopathological image of the right supraclavicular swelling post excision biopsy showing fat cells (arrow marked) suggesting lipoma.

DISCUSSION

Benign swellings in the neck can occur congenitally or acquired. It may occur as a cyst-like sebaceous cyst, keratin cyst, branchial cleft cyst, thyroglossal cyst, and solid lesions like fibroma, neck node, chondroma, and lipoma. Keratin cysts are cyst which is epithelial in origin and contains keratin debris and causes repeated infection and enlargement.[4] Sometimes keratin cysts can burst open causing pultaceous discharge. This cyst warrants complete excision to prevent a recurrence.

Lipoma is a benign condition occurring due to the proliferation of fat cells and remains asymptomatic for a long time.[5] Lipoma occurs more commonly in the neck region (posterior triangle or shoulder) but can rarely seen in the anterior part of the neck.

In the literature, there is a case of supraclavicular spindle cell lipoma but none reported a simple lipoma.[6]

Supraclavicular lipomas have also been reported as a cause of branchial plexus compression and respiratory distress due to tracheal compression.[7] Lipomas of more than 10 cm is defined as giant lipomas that have been noted in the literature.[8]

As in our case the supraclavicular lipoma was almost 8.5 cm without causing any brachial plexus compression or respiratory distress and was successfully excised into, to without injuring the brachial plexus and major vessels of the neck.

CONCLUSION

Huge neck swelling such as lipoma rare in the Supraclavicular region, as seen in our case report can lead to compression symptoms causing respiratory distress. Supraclavicular lipoma lying close to the great vessels of the neck challenges the operating surgeon during excision. Whereas keratin cysts cause recurrence if not excised into to and are rarely seen in the infra-auricular region. Hence proper diagnosis and planning preoperatively can aid the surgeon in complete excision with minimal complications and no recurrence.

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