

From Painless to Prominent: A Case of A Giant Neck Lipoma

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ABSTRACT

Head and neck lipomas are rare, accounting for less than 5% of all lipomas. They typically present as slow-growing, painless masses but can pose diagnostic challenges due to their proximity to vital structures. We report a case of a 48-year-old female with a gradually enlarging mass in the right lateral neck region mimicking a goitre. Imaging confirmed a well-encapsulated lipoma, and surgical excision was performed. Histopathology verified its benign nature. While prognosis is generally excellent, infiltrating lipomas carry a risk of recurrence. This case highlights the importance of accurate diagnosis and timely surgical management of head and neck lipomas.

Keywords

Lipoma; Giant; Head and neck; Excision

7-year history of a progressively growing neck swelling is suggestive of its chronicity. The initial primary diagnosis for these swellings can be of a thyroid pathology, lipoma, liposarcoma or even parathyroid carcinoma [4].

Case Summary

A 48-year-old female with underlying hypertension, dyslipidemia, with morbid obesity of BMI 40 kg/m² presented with right neck swelling past 7 years, noticed by herself. Initially the size was around 20 cents, then it slowly progressive in size. The size of the swelling was not fluctuating and she denied any discharge or pain from the swelling.

There was no hyper or hypothyroid symptoms, no change of voice, shortness of breath, or other obstructive symptoms. She was able to tolerate orally well. All other symptoms were negative. On the neck examination, there was a huge left neck swelling occupying level II-IV, measuring 15 x 8 cm. It was soft, ovoid in shape, smooth surface, not fluctuant, no skin changes or dilated veins. Anteriorly the mass was approaching midline, posteriorly extending to posterior border of sternocleidomastoid, superiorly about 2 cm below mandible, inferiorly extending to

INTRODUCTION

Lipomas are the most common benign mesenchymal tumors, composed of mature adipocytes and typically encased in a thin fibrous capsule. While they can arise anywhere in the body, head and neck lipomas account for approximately 13–20% of all cases (1). These tumors usually present as slow-growing, painless, soft, and mobile subcutaneous masses. Though generally asymptomatic, larger lipomas may cause cosmetic deformities or, in rare cases, compress nearby structures, leading to dysphagia, dyspnea, or hoarseness. Studies show a slight female predominance, and multiple lipomas (lipomatosis) are more frequently observed in women (2).

Giant lipomas, defined as those exceeding 10 cm in size or weighing over 1,000 g, are rare in the head and neck region but pose additional challenges due to their potential for compressing vital structures and causing functional impairment. They may mimic malignant soft tissue tumors, emphasizing the need for thorough clinical and radiological evaluation (3). The aetiology of neck swellings can be divided by onset or duration, namely, congenital, acute, subacute and chronic. In this case, a

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clavicle, but able to get underneath the swelling. It was non tender, mobile, overlying skin pinchable, non-pulsatile and not moving with deglutition. The trachea was central, palpable, not deviated, laryngeal framework palpable, crepitus present. Intraoral examination and flexible nasopharyngolaryngoscopy were all normal.

Ultrasonography (USG) of the neck showed a right anterolateral neck mass measuring 2.8 x 6.4 x 5.2 cm (Figure 1). Thyroid is homogenous in nature. The patient was scheduled for excision under general anesthesia. A well-capsulated and soft mass measuring 10 x 5 cm was excised (Figure 2). The specimen measured more than 10 cm in its greatest dimension (Figure 3) and it was sent for histopathological examination, which revealed as lipoma. The patient recuperated well with no further bleeding in the immediate and late post-operative period.



Figure 1: The lipoma as depicted on ultrasound of the right lateral neck



Figure 2: Intra-operative findings of the mass which was completely excised



Figure 3: Right lateral neck lipoma measuring more than 10 cm x 5 cm

DISCUSSION

Head and neck lipomas, though benign, can mimic other soft tissue masses such as sebaceous cysts, lymphadenopathy, salivary gland tumors, and neurofibromas. Clinically, they present as soft, mobile, painless swellings, but larger lipomas may cause compression symptoms like dysphagia or airway obstruction, particularly in deep neck spaces (1). Giant lipomas, defined as those exceeding 10 cm or 1,000 g, are rare in the head and neck but can compress vital structures, leading to dyspnea, dysphagia, or neural deficits (3). Differentiating them from well-differentiated liposarcomas (WDLPS) is crucial, as both may appear similar but require different management strategies (5). Several case reports highlight the diagnostic and surgical challenges associated with giant lipomas in the neck and submandibular region, emphasizing their potential to mimic thyroid goiters, sialolipomas, or other soft tissue tumors (6–8).

Imaging plays a key role in diagnosis. USG typically shows well-defined, hyperechoic lesions, while magnetic resonance imaging (MRI), the gold standard, reveals high-intensity signals on T1-weighted images, confirming fat content. CT scans help assess deep-seated lipomas or detect calcifications but offer lower soft tissue contrast than MRI (9). In giant lipomas, MRI is particularly useful for delineating tumor margins and ruling out liposarcoma (10). Cases of anterior neck giant lipomas and intramuscular SCM lipomas demonstrate the importance of imaging in differentiating them from more aggressive lesions, ensuring optimal surgical planning (7,8).

Surgical excision is the primary treatment, especially for symptomatic or enlarging lipomas. Complete removal, including the fibrous capsule, minimizes recurrence risk (11). Liposuction may be considered in cosmetically sensitive areas but is generally unsuitable for capsulated or infiltrating lipomas (12). While the prognosis for most lipomas is excellent, giant and infiltrating lipomas have a higher recurrence risk. Malignant transformation is rare but should be considered in cases of rapid growth, pain, or recurrence (13).

CONCLUSION

Giant anterior neck lipoma is rare. The huge size rarely causes compression to the adjacent structures; however, it imposes surgical challenges due to its close proximity to vital structures. Surgical strategy of giant head and neck lipomas can be variable and should be adapted to the mass location, size and radiological imaging. Complete resection of these lipomas is crucial to avoid recurrences with the emphasis in long-term follow-up especially for previously symptomatic cases.

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Conflict of Interest

None

Ethical clearance

No ethical clearance required as it only involves a case report.

Authors's contribution

Data gathering and idea owner of this study:

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