



An Unconventional Case of Lipoma of the Neck: A Case Report and Review of Literature

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Abstract

Lipomas are benign subcutaneous tumours arising from adipocytes. They are commonly found at various sites of the body, although occurrence in the neck is a rarity. In this case report, we shall discuss about a rare neck lipoma situated between the left carotid sheath and tracheo-oesophageal groove and its planned surgical excision.

Keywords: Neck; Lipoma; Carotid Sheath

Introduction

Lipomas are defined as a common subcutaneous tumour composed of adipose (fat) cells, often encapsulated by a thin layer of fibrous tissue. The tumours typically lie in the subcutaneous tissues and can appear anywhere in the body, but most commonly over the back, trunk, arms, shoulders and neck. These lesions are often benign, but the age of onset can vary. Usually, they are asymptomatic and do not require any treatment. They pose no threat to the patient unless they are located on joints or rapidly growing, which is uncommon as the typical lipoma growth is slow.

Lipomas can sometimes, though rarely, be associated with certain disorders such as multiple hereditary lipomatosis, Gardner syndrome, adiposis dolorosa, and Madelung's disease.

Lipomas are defined as mesenchymal tumours, which typically lie subcutaneously. Less commonly, they can also be found in visceral organs, such as the stomach and bowels and are not typically attached to underlying muscle fascia. Histologically, lipomas are composed of lobulated, slow-growing, mature adipose tissue, hav-

ing minimal connective tissue stroma. They are commonly enclosed in a thin, fibrous capsule.

Variants of lipoma defined by location include:

- Intermuscular lipoma
- Intramuscular lipoma
- Parosteal/periosteal lipoma
- Lipoma arborescens (synovial lipomatosis)
- Intracranial lipoma

In this case report, we discuss an unconventional site of Lipoma, situated between the left carotid sheath and the trachea-oesophageal groove, its presentation, diagnosis and surgical management. We have also included a short review of the English literature highlighting the reporting of such a rare location of the lesion in the past.

Case Description

An 80-year-old male patient presented to the Out-patient Department (OPD) with a swelling over the left side of the neck,

progressively enlarging over 5 years. On clinical examination, the mass was located medial to the upper third portion of the left Sternocleidomastoid muscle and lateral to the thyroid cartilage (Figure 1). The swelling did not move with deglutition.



Figure 1: Pre-operative image showing the site of the lesion.

Contrast enhanced MRI (CEMRI) of neck showed a uniform hyperintense mass lateral to the laryngeal framework and displacing the carotid sheath laterally (Figure 2).



Figure 2: CEMRI image showing the site, size and extent of the lesion.

Surgical procedure

Anesthetic clearance was sought and surgery was planned. A transverse cervical incision was made on the neck along the upper neck crease and subplatysmal flaps were raised. The mass was found to be situated between the carotid sheath and aero-digestive tract, extending superiorly up to the hyoid, inferiorly up to the superior belly of omohyoid (Figure 3). It was carefully dissected out from the carotid sheath as lesion was abutting the Vagus nerve laterally and recurrent laryngeal nerve medially (Figure 4).



Figure 3: Image showing the mass situated between the left carotid sheath and the trachea-oesophageal groove.

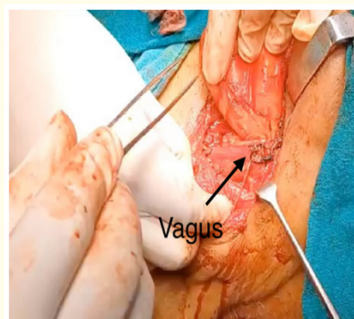


Figure 4: Image showing the lesion being dissected away from the left Vagus nerve.

Grossly, the mass was 11 cm x 5 cm in length and clinically seemed like a lipoma (Figure 5). Histopathological examination (HPE) revealed mature adipose tissue, few small capillaries within thin fibrous strands and a thin fibrous capsule (Figure 6). The post-operative period was uneventful, the patient was asymptomatic with no evidence of recurrence during the course of two years of follow-up.



Figure 5: Image showing the excised mass.

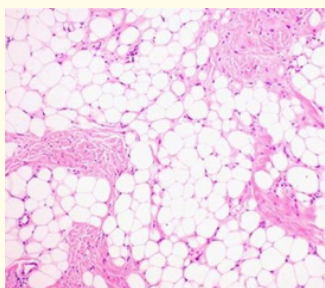


Figure 6: Image showing the HPE.

Discussion

One of the earliest case reports of a giant lipoma in the neck was presented by Satyanarayanamurty [1]. Lipomas of the neck are rare, mostly located in the posterior neck [3,4] and can cause clinical discomfort and cosmetic deformity. Anterior neck lipomas, although reported, are fewer in number. Reports of giant-sized lipomas are rarer still [2].

It is important to differentiate the lipomas in the anterior part of the neck from a thyroid gland swelling [3]. Rarely it may arise from other structures like the parotid [4].

The lipoma, owing to its consistency, can extend into the surrounding structures of the neck, which needs preoperative assessment via imaging, preferably a CEMRI. Rarity of this case lies in its location, being situated at the anterior neck space in between the upper aero-digestive tract medially and carotid sheath laterally.

Intra-operative findings in this case were consistent with that of a lipoma. Although it had multiple extensions and no well-defined capsule, it separated easily from the surrounding structures with some traction and minimal dissection. Care was taken not to cause any inadvertent injury to the carotid sheath and Vagus nerve.

Although techniques such as liposuction have been described as a treatment option for lipomas⁵, a review of the available English literature suggests that complete surgical excision is the best option for such cases, even in patients with complicated presentation.

Conclusion

Lipomas are infrequent entities in the head and neck region. Due to the complexity of anatomy of the neck region, a detailed

clinical and radiological evaluation of the lesion should be carried out. Surgical excision of this lesion should be considered as the preferred mode of treatment unless contraindicated.

Informed Consent

Written informed consent was obtained from patient who participated in this study.

Conflict of Interest

Authors have no conflicts of interest to declare.

Financial Disclosure

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