

## SHORT COMMUNICATION

## Rare Neck Angiolipoma Managed with Surgical Excision: A Case Report

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## ABSTRACT

We present the case of a 58 year old female with a large left sided chronic supraclavicular swelling which was gradually increasing in size. Excision biopsy revealed a large mass attached to brachial plexus. Histopathological examination showed angiolipoma, a rare variant of lipoma. There is no recurrence over 1 year of follow up. To the best of our knowledge, this is the tenth reported case of angiolipoma in the neck worldwide.

## KEYWORDS

• Angiolipoma • Lipoma • Neck swelling.

## INTRODUCTION

Angiolipoma is a variant of lipoma. An English language Pubmed search reveals 9 cases of neck angiolipoma that have been reported so far.<sup>1-9</sup> We excised a large, supraclavicular angiolipoma attached to brachial plexus in a 58year old female, making this the tenth reported case of neck angiolipoma worldwide as per our knowledge.

## CASE REPORT

A 58 year old female presented with a left sided supraclavicular swelling of 10

year duration which was insidious in onset, painless, slowly progressive in size (Figure 1). There was no swelling/weakness/diminished sensation in left upper limb or neck movement restriction. There was no chronic cough or chest wall pain. She had been administered anti-tubercular therapy(ATT) twice, each time for six months on suspicion of lymph nodal Tuberculosis. There was no regression with ATT. On examination, there was no local rise in temperature or tenderness. Swelling was approximately 10 cm x 8 cm in size, with smooth surface, regular margins and firm consistency. It was non-fluctuant, with no

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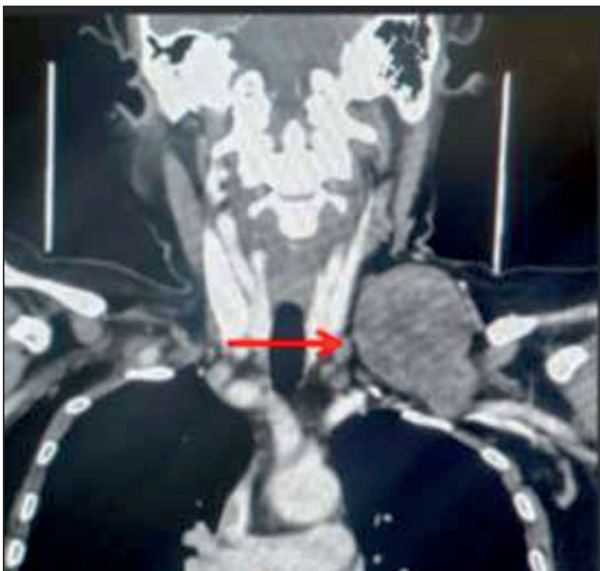
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impulse on coughing. Overlying skin was mobile and mobility of swelling in transverse direction was partially restricted. The lower border of swelling was going under the clavicle. No regional lymphadenopathy was present.

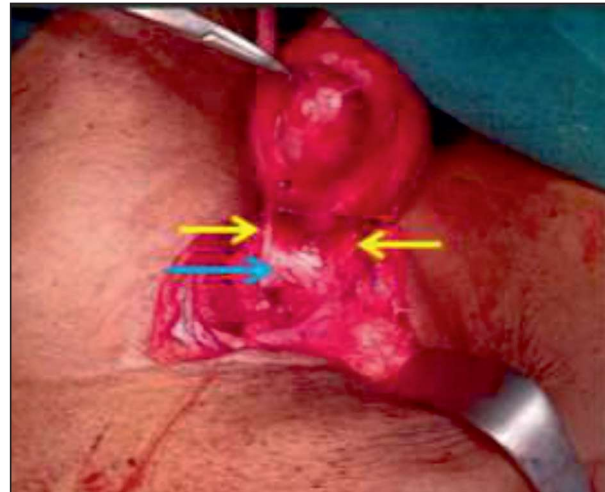


**Figure 1:** Clinical photograph showing a large swelling located in posterior triangle with normal overlying skin

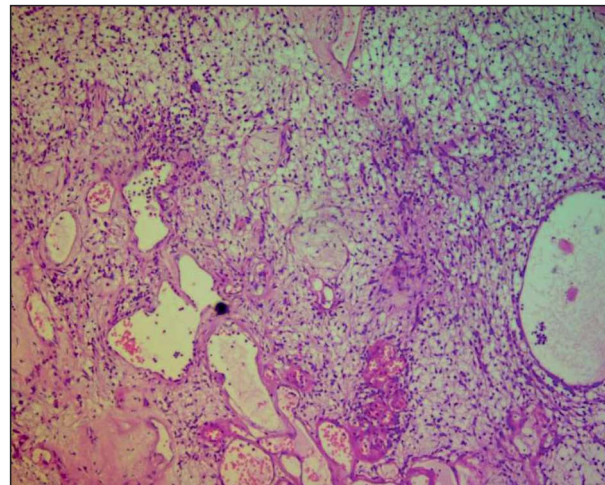
Fine Needle Aspiration Cytology (FNAC) attempted from the neck swelling yielded blood immediately on needle insertion, rendering a possibility of a hemangioma. The patient was referred to Cardiothoracic & Vascular department for further management. CECT thorax and neck was done to assess the extent and nature of swelling along with any lung lesion(s), in view of the h/o ATT use and inability to get below the swelling. It was reported as a lipoma abutting the brachial plexus with preserved fat planes (Figure 2).



**Figure 2:** Coronal section of a contrast enhanced CT thorax with red arrow marking the tumour



**Figure 3:** Operative photograph showing the multilobulated tumour with blue arrow marking brachial plexus and yellow arrows marking the nerve entering the tumour. The hemostat points to the part of tumour extending under the clavicle



**Figure 4:** Microphotograph showing mature adipose tissue and clusters of network of blood vessels (HE, 10x magnification)

The lesion was excised under general anaesthesia using a supraclavicular incision placed in skin fold. The mass was deep to platysma, located in the posterior triangle. The resection was challenging, as the mass was attached to the brachial plexus as well as wedged underneath the clavicle, essentially fixing it in place. Once superficial layers were dissected, a working plane between swelling and brachial plexus was developed. Separation of swelling from brachial plexus allowed room to dissect it out from underneath the clavicle. Two nerve twigs were seen entering the swelling and they were sacrificed (Figure 3). The wound was closed in layers with a vacuum suction drain in situ. No neurological deficit was noted postoperatively. The drain was removed on POD3. The wound healed

well. The tissue was sent for histopathological examination. Sections examined revealed a benign thinly encapsulated tumour consisting of mature adipose tissue and clusters of thin walled vessels. (Figure 4) A diagnosis of angiolipoma was offered.

There has not been any recurrence or would site complication in past 1 year of follow up.

## DISCUSSION

Angiolipoma are a rare type of lipoma (5-17%).<sup>10</sup> The occurrence in neck region is extremely rare, with handful of cases reported so far. An English language search on Pubmed reveals 9 published cases so far.<sup>1-9</sup> To the best of our knowledge, this is the 10<sup>th</sup> case.

Described first by Bowen in 1912, presence of capillary clusters on microscopic examination, often with thrombi within, differentiate angiolipomas from garden-variety lipomas.<sup>11</sup> These swellings are often tender to touch, occurring commonly on trunk and forearms. Angiolipoma are usually benign, but infiltrating tumours have been described.<sup>12</sup> An R0 resection is usually curative.

The presentation of this large neck angiolipoma is also interesting, with patient being administered ATT twice earlier on suspicion of lymph node tuberculosis. The patient was referred to us with suspicion of hemangioma. Imaging revealed it abutting the subclavian artery. During excision, it was found stuck to brachial plexus and we suspected it may be neurolipoma or a neurofibroma. However, the pathologist had the final word. Resection was therapeutic for patient.

To sum it, angiolipoma are usually benign. FNAC may be considered in case of suspicion of malignancy following basic radiological study. For benign angiolipomas, excision biopsy is curative.

## Acknowledgements

**Conflict of Interest:** None.

**Consent:** Case Report Consent Form was signed by the patient and the original article is attached with the patient's chart.

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