



### CASE REPORT

## A case report of lipoma at unusual sites

#### Manuscript ID: 564

Baruah AR<sup>1</sup>, Gogoi A<sup>2</sup>, Bhuyan R<sup>3</sup>,  
Saikia NJ<sup>4</sup>, Baruah SM<sup>5</sup>

#### Address for correspondence:

<sup>1</sup>Specialist Medical Officer  
(Corresponding Author)

Email: [rumubaruah268@gmail.com](mailto:rumubaruah268@gmail.com)

Mobile: +916900536034

Teok FRU, Jorhat, Assam-12

ORCID ID: 0000-0002-5631-4100

<sup>2</sup>Senior Consultant General and  
Laparoscopic Surgeon

<sup>3</sup>Associate Professor, Radiodiagnosis,  
Jorhat Medical College

<sup>4</sup>Consultant Anaesthesiologist

<sup>5</sup>Sub-divisional Medical and Health  
Officer, Teok FRU

Article received: 03-12-2022

Received (revised): 05-12-2022

Editorial approval: 10-12-2022

Checked for plagiarism: Yes

Peer-reviewed: Yes

Editor who approved: Prof. NN  
Ganguly

#### Abstract

Lipomas are the most common benign tumour of mesenchymal origin. They arise in any location where fat usually is present. Only 13% of lipomas are seen in the head and neck region, and the most common site is the posterior triangle. Deep-seated intramuscular chest wall lipomas are rarer than superficial lipomas. We present two cases of lipoma in rare locations, one in the right lateral thoracic wall with a deep attachment to the external intercostal muscles and the other in the left supraclavicular fossa with deep extensions.

Keywords: Benign; mesenchymal; intercostals; infiltrative; adipose; aesthetic

**Cite this article:** Baruah AR, Gogoi A, Bhuyan R, Saikia NJ, Baruah SM. Case report of lipoma at unusual sites. *Int J Health Res Medico Leg Prae* 2022 July-Dec;8(2):77-80. Doi: 10.31741/ijbrmlp.v8.i2.2022.13

### INTRODUCTION

A lipoma is a benign tumour of mesenchymal origin. It is composed of adipose tissue. It is the most common form of soft tissue tumour. Lipomas can occur in any location where fat is present. The majority of them are found in the trunk and extremities. Only 13% of lipomas are seen in the head and neck region.<sup>1</sup>

Lipomas are usually asymptomatic and gradually progress in size. They mainly cause cosmetic disfigurement and functional deficits. Based on location, lipomas of the

chest wall can be classified into two types - superficial and deep-seated. Deep-seated intramuscular chest wall lipomas are less common than superficial lipomas. They can show histologically infiltrative behaviours and have the potential for malignancy.<sup>2</sup>

We present two cases of lipoma at rare locations, one in the right lateral thoracic wall with a deep attachment to the external intercostal muscles and the other in the left supraclavicular fossa with deep extensions.

**Case 1:**

**Case history one:** A 42-year-old female patient presented with swelling in the right lateral chest wall for the last six months(**Figure 1**). It was mobile and painless, with a soft consistency and a smooth surface. The overlying skin is normal, and there were no pulsations over the swelling. On ultrasonography, a lipomatous lesion in the right lateral chest wall beneath the muscular layer and abutting the underlying chest wall is seen. It is 10.7×7.5×4 cm and 12-17 mm beneath the skin surface, as shown in **Figure 2**.



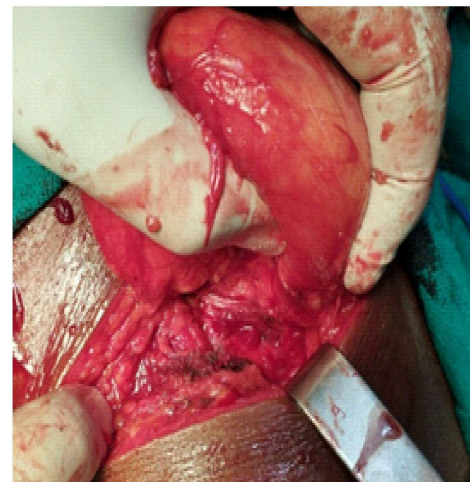
**Figure 1** Swelling in the lateral chest wall (pointed by the sponge holder)



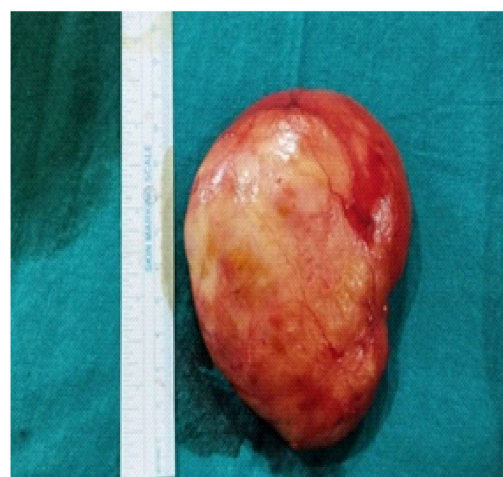
**Figure 2** Ultrasonographic view of the tumour

It was operated under an intercostal block under all aseptic and antiseptic conditions. After placing an incision parallel to the ribs, the superficial layers were separated, and the tumour was reached. Then, the surrounding area laterally was separated using sharp and blunt dissection, and a bipolar electro-surgical energy source was used wherever required. It was found that the base of the tumour was attached to the intercostal muscles. Careful blunt dissections were done to separate the tumour using a bipolar electro-surgical energy source so that the intercostal muscle's neurovascular bundles were not injured. After the separation

of the tumour, bleeding is controlled, and the incision is closed in layers after placement of a suction drain, which was removed after 24 hours with no collection noted. The patient was on injectable broad-spectrum antibiotics and required only the morning dose of analgesics (Ganguly's score of pain after surgery Grade 1),<sup>3</sup> as shown in **Figure 3 and 4**. The patient was discharged after 24 hours. The histopathology report of the tumour shows it to be a lipoma. No postoperative neurovascular deficit was noted.



**Figure 3** The tumour (black arrow) being separated from the intercostal muscles (black arrows)



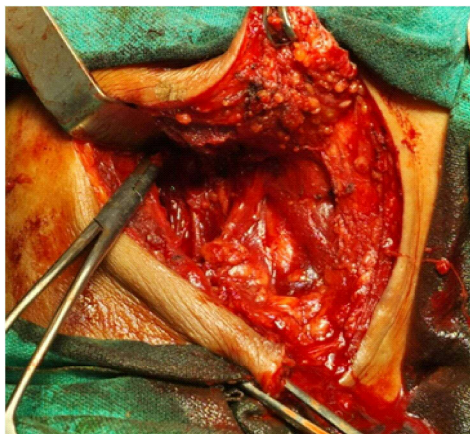
**Figure 4** The tumour after separation

## Case 2:

**Case history:** A 50-year-old male patient presented with a soft, smooth, partly mobile, non-pulsatile swelling in the left supraclavicular fossa. The lower margin of the swelling could not be palpated, and the overlying skin was normal. High-resolution computed tomography of the thorax showed a mass of 5×11.2×6 cm extending from the left supraclavicular fossa to around 7-8 cm deep into the thoracic cavity.

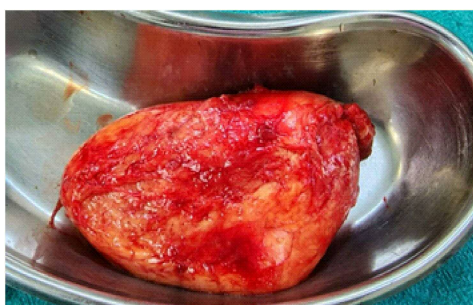
On exploration under general anaesthesia, the tumour was found to place longitudinally. It was laterally extended below the insertion of the trapezius muscle at the scapula and acromion and medially to the posterior triangle of the neck. The deep extensions were around 8-10 cm with no pulsatile vessels in the vicinity. The tumour was attached to a part of the brachial plexus.

With the help of a bipolar electro-surgical energy source, the trapezius was divided near its insertion for the separation of the lateral part of the swelling. Then, by careful blunt and occasional sharp dissection, the tumour is separated from the surrounding structures and dense adhesions and the brachial plexus from laterally to medially. Once the tumour is partially lifted, the base is exposed, from which gentle dissections separate (Figure 5).



**Figure 5** Operating site after removal of the tumour divided part of trapezius (black arrow), part of brachial plexus (red arrow), medial side (white arrow)

Then the medial side of the tumour is separated from the posterior triangle of the neck, and the specimen is taken out (Figure 6).



**Figure 6** The specimen after removal

The trapezius is repaired, and bleeding is controlled, followed by placing two absorbable gelatine sponges soaked in a sterile hemocoagulant solution and a suction drain. Then the incision was closed in layers.

The patient was on injectable broad-spectrum antibiotics for 48 hours and needed injectable analgesics as per Ganguly's score of pain after surgery grade 2.<sup>3</sup> There was a serosanguinous collection of about 40-50ml in the suction drain in the first 24 hours and a serous collection of around 10ml at the end of 48 hours, following which it was removed, and the patient was discharged. The histopathological report showed it to be a lipoma. No postoperative neurovascular deficit was noted in the left upper limb.

## DISCUSSION

A lipoma is a benign tumour of mesenchymal origin and composed of adipose tissue. It is the most common form of soft tissue tumour and can occur anywhere where fat is present. The majority of them are found in the trunk and extremities. Only 13% of lipomas are seen in the head and neck region.<sup>1</sup>

Lipomas are usually asymptomatic and gradually progress in size. They mainly cause cosmetic disfigurement and functional deficits. Based on location, lipomas of the chest wall can be classified into two types - superficial and deep-seated. Deep-seated intramuscular chest wall lipomas are rarer than superficial lipomas. They can show histologically infiltrative behaviours and have the potential for malignancy.<sup>2</sup>

Lipomas are usually diagnosed based on clinical history and examination and with the help of investigations like ultrasonography, computed tomography scan, magnetic resonance imaging, and fine needle aspiration cytology followed by histopathology. Surgical excision remains the mainstay of treatment, and the surgical approach mainly depends on the site and extent of the mass. Lipomas are usually not associated with complications, and their chances of recurrence are low if removed completely.<sup>4</sup> Some of the differential diagnoses are lymphoepithelial cysts, epidermoid and dermoid cysts.

## CONCLUSION

Lipomas are one of the most common mesenchymal tumours, usually asymptomatic. Clinical examination with additional investigations helps diagnose, and surgical excision is the treatment.

**Conflict of interest:** None declared.

**Ethical clearance:** Taken.

**Source of funding:** None.

**Author disclosure:** The article is original with the author(s) and does not infringe any copyright or violate any other third party's rights. The article has not been published (whole or in part) elsewhere and is not being considered for publication elsewhere in any form except as provided herein. All author(s) have contributed sufficiently to the article to take public responsibility for it, and all author(s) have reviewed the final version of the above manuscript and approved it for publication.

## REFERENCES

1. Kim KS, Yang HS. Unusual locations of lipoma: differential diagnosis of head and neck mass. *Australian family physician*. 2014 Dec;43(12):867-70.
2. Rana K, Meher R, Singh I, Narula V, Sura JH. Lipoma in unusual head and neck region: case series of 4 patients. *International Journal of Pediatric Otorhinolaryngology Extra* 2013 Sep 1;8(3):75-8.
3. Ganguly NN. Open cholecystectomy: farewell to a routine procedure. Paper presented at Fifth World Congress of the IHPBA, 2002; Tokyo, Japan.
4. Hwang J, Jo WM, Min BJ, Shin JS. Deep-seated intramuscular lipoma penetrates the intercostal muscle. *Journal of Thoracic Disease*. 2015 Oct;7(10):E493.
5. Hoseini AT, Razavi SM, Khabazian A. Lipoma in oral mucosa: two case reports. *Dental research journal* 2010;7(1):41.

\*\*\*