

Giant Axillary Lipoma

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Abstract

Lipomas are one of the most common mesenchymal tumours encountered in surgical practice. Most of the lipomas are small, discrete swelling usually asymptomatic occurring most commonly on the trunk and extremities. Axilla is unusual site for lipoma.

We report a very rare case of a giant lipoma in Axilla compressing axillary vein and brachial plexus. This is third case of giant axillary lipoma reported in literature and the first case to compress axillary vein and cause venous obstruction and nerve compression symptoms.

The presentation and related literature is discussed.

Introduction

Lipomas are most common soft tissue mesenchymal tumours accounting for 16% of all neoplasms. They arise from any part of body¹ but are commonly seen on trunk and extremities.² Most of lipomas are small, discrete swelling weighing only few grams with an average weight of 30 gram.³ Lipomas upto 25 kg have been published in literature.³ Giant lipomas are defined by Sanchez *et al* as size of at least 10 cm in one dimension or weighs a minimum of 1000 gm.⁴ The axillary region is an unusual localization for the lipoma. Lipomas are subclassified according to their aetiologies, histologic features, localizations, and dimensions. We present a case of giant axillary lipoma

Case Report

A 32 year old man presented with right sided axillary swelling (Fig. 1) since 4 years. It was asymptomatic initially, however since last 3 months he started experiencing pain and tingling numbness in right hand on lifting weight. Clinical examination revealed a painless, nontender, soft mass filling the

axilla, On adduction of right arm the swelling was seen to extend into the infraclavicular region and dilation of superficial veins of right upper limb (Fig. 2). Skin over swelling was unremarkable except for dilated veins. Fine needle aspiration cytology (FNAC) of swelling was suggestive of Lipoma.

The patient was operated under general anaesthesia. A lazy-S skin incision was made over the tumour in the axillary region. The tumour was dissected out of axilla taking care of axillary vein (Fig. 3). The specimen weighed 1060 g and measured 24 cm x 10 cm x 6 cm. Histological examination of the specimen revealed a benign lipoma. His postoperative course was uneventful with no neurological dysfunction.

Patient is disease and symptom free at end of 1



Fig. 1 : Image of Giant lipoma of right axilla.

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Fig. 2 : Giant lipoma extending into infraclavicular region and causing vascular compression on adduction.

year of follow up.

Discussion

Most lipomas are small, weighing only a few grams, Aydogdu et al reported the largest tumour, weighing 22.7 kg after surgical removal from scapular region,² giant lipoma upto 25 kg is reported in case of morbid obesity.³ Most common site of giant lipoma being back and thigh.^{2,5} Lipomas have been described in internal organs such as liver, lung, kidney, uterus where little or no adipose tissue is present.⁶ Usually lipomas are asymptomatic, except for the giant form of the tumour, in which its dimensions can cause compression syndromes and movement restriction. In our case it was causing neurovascular compression.

De Andrade *et al*⁷ presented their experience with 31 cases of axillary masses. A total of 38.7 per cent of the masses originated from lymph tissue. Sixteen per cent of patients had ectopic breasts, and ruptured infundibular follicular cysts, nodular fibromatosis, inflammatory tuberculous, and inflammatory rheumatoid lymphadenitis were detected. Only one patient had axillary lipoma (3 per cent) in their study. This shows that lipomas are not frequently seen in axilla.



Fig. 3 : Giant lipoma dissected from axillary vein and brachial plexus.

Copcu reported the first case of giant axillary lipoma in literature⁸ in 2004, followed by second case of Vandeweyer⁹ in 2005.

The axillary region is a specific location for hibernoma.¹⁰ Hibernomas are rare soft-tissue tumours of brown fat differentiation. Brown fat can be found primarily in scapular, interscapular, mediastinal, axillary, and perirenal sites.¹¹

The mechanism for the uncontrolled growth of such lipomas remains unclear. However, it was proposed that after a blunt trauma, rupture of the fibrous septa, which prevent migration of fat, accompanied by tears of the anchorage between the skin and the deep fascia may result in proliferation of adipose tissue. Trauma is an important factor in the pathogenesis of lipoma.¹² Since the axillary region is one of the most moveable parts of the body, the tumour was exposed to microtraumas with each movement of the upper extremity.

The main concern in the diagnostic procedure for huge lipomas should be to rule out malignancy. Fine-needle aspiration cytology, together with ultrasonography, can aid in establishing a preoperative diagnosis. Computed tomography and magnetic resonance imaging scans are well-established

methods of diagnosis. Giant internal lipomas have been reported to show sarcomatous transformation; however, such a transformation for lesions on other parts of the body is exceedingly rare.

The treatment for giant lipoma is complete excision. Liposuction for such tumours has also been reported.¹³ Because giant lipomas usually have a well-defined pseudocapsule, dissection around these benign neoplasms is performed rather easily. Finally to our knowledge, this is third reported case of giant lipoma located on the axillary region and first case of giant axillary lipoma causing neurovascular compression of upper limb.

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ROSIGLITAZONE NO LONGER RECOMMENDED

In August, 2007, the FDA announced black-box warnings for rosiglitazone and pioglitazone (the other TZD marketed by Takeda).

Further concerns about the TZDs were raised earlier this year when the ACCORD trials was terminated early after patients in the intensive treatment arm (91% of whom received rosiglitazone) were at significantly increased risk of death, specifically from cardiovascular disease.

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