



GIANT LIPOMA OF THE POSTERIOR NECK - A RARE TUMOR

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ABSTRACT

Lipomas are slow-growing benign soft-tissue tumors which are typically asymptomatic and occur in approximately 1% of the population. A lipoma is considered to be of excessive size when it is greater than 10 cm in length (in any dimension) or weighs over 1000 g. We describe a case of a man presenting with a giant posterior neck mass which greatly reduced the sagittal range of cervical spine. A discussion of the pathophysiology of lipomas and a literature review regarding giant lipomas versus malignancy follows.

INTRODUCTION

Lipomas are slow-growing benign soft-tissue tumors which are typically asymptomatic and occur in approximately 1% of the population [1]. Lipomas are the most common mesenchymal tumors (estimated incidence 10%) [2]. Whereas the majority of lipomas grow on the extremities and trunk, only 13% are reported to form on the neck and the head [3]. A lipoma is considered to be of excessive size when it is greater than 10 cm in length (in any dimension) or weighs over 1000 g [4]. Deep lipomas can grow to very large proportions before producing symptoms; gigantic retroperitoneal lipomas weighting more than twenty kilos have been reported [5].

Aydogdu et al reported the largest tumour, weighing 22.7 kg after surgical removal from scapular region [6]. Giant lipomas may cause mechanical dysfunction, pain and altered sensibility due to their size and the resulting compression of neighbouring structures. Patients usually seek treatment due to social embarrassment resulting from the inability to properly wear clothing and occasional symptoms due to the compression of adjacent nerves. Surgical excision of a lipoma is often used as the definitive treatment. We present the case of a 65 year old man who presented with a giant Neck lipoma for the past 12 years.

The 4.6 kg mass was successfully removed with excellent results and no functional impairment.

CASE REPORT

A 65-years-old gentleman reported in surgical OPD with a giant lump hanging from the back of neck. He had complaint of pain and discomfort caused by a large posterior neck mass [figure 1]. The patient states that he noticed the mass for last 12 years and now it has grown to the point where he can no longer fully extend his neck. He has constant midline neck pain, headaches. The size of the lipoma inhibited the patient's ability to look directly up without turning his head sideward. The patient's pains, decreased range of motion, have gradually worsened to the point where his symptoms are aggravated by any movement of his head or neck. There was no history of sudden change in size of swelling. There was not any history of fever, loss of appetite, loss of weight. Personal and family histories were unremarkable. General and systemic examinations were unremarkable. Upon local examination, a huge lump was evident hanging upon posterior aspect of the neck. It was approximately 30 cm × 16 cm × 15 cm in dimensions. Its root was attached to the nape of neck and from here the mass was hanging freely. The surface appeared to be lobulated. The overlying skin was normal except for an irregular desquamated area of size 6 cm × 5 cm in the distal most portion of lump. Serous fluid was oozing from this desquamated patch. Upon palpation the lump was neither warm nor tender.

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It was soft in consistency. The surface was lobulated. The lump was not fixed to the overlying skin and surrounding structures. There was no regional lymph node enlargement. A provisional diagnosis of lipoma was made. Routine investigations were unremarkable. X ray of the local area was done [Figure 2]. FNAC from the swelling was suggestive of a benign fibrolipoma. A contrast enhanced CT scan of neck and thorax region was obtained to rule out any suspicious foci of malignant transformation in the mass [Figure 3]. The mass however turned out to be essentially benign and showed no infiltration of surrounding vital structures in the neck.

The patient was taken up for surgery after proper preanesthetic checkup. An elliptical transverse incision was given at around the base of the lump. The superior and inferior skin flaps were raised. Separation of lipoma from the surrounding tissues was performed with sharp and blunt dissection [Figure 4]. The redundant skin was removed and the upper and lower skin flaps were stitched together. The resected mass was 4.6 kg in weight and 28 cm × 16 cm × 15 cm in dimensions. Postoperative period was uneventful. Histopathology report confirmed the FNAC finding of fibrolipoma. The patient was doing well until his last followup visit.

Figure 1. Showing Giant Lipoma with Overlying Area of Skin Ulceration



Figure 2. Chest X Ray Showing the Opacity of the Giant Lipoma



Figure 3. showing CT Scan and the Extent of Lipoma with Septations in the Mass. Pseudocapsule is Seen Around the Mass



Figure 4. Excised Specimen of the Lipoma



DISCUSSION

Lipomas are one of the most common benign mesenchymal tumours in the body and are mainly composed of mature adipose cells. They may be referred to as a fibrolipomas due to the fibrous septae present. Lipomas can be found in almost all organs of the body where fat normally exists and are, therefore, known as ubiquitous or universal tumours [7]. They are usually located on the trunk or extremities; however, they can also be interosseous, visceral, intramural, subfacial or intermuscular. Lipomas greater than 10 cm in diameter are classified as giant lipomas. Most lipomas present as small subcutaneous swellings without any specific symptom. Giant lipomas, although rare, can present in the thigh, shoulder or trunk. Giant lipomas of the axillary area are very rare [8]. A definitive diagnosis of giant lipoma can be made only by histopathological examination. However, once suspected, other investigations can provide additional information about the tumour. The characteristics of benign lipomas on ultrasonography, computed tomography and magnetic resonance imaging have been well established, and technetium-99 diethylenetriaminepentaacetic acid scanning has also been used to confirm the diagnosis [9-10]. In their typical form, they seldom present diagnostic problems for the pathologist. However, lipomas located in deeper locations of the body (eg, intramuscular lipoma, perineural lipoma) or those with unusual features (eg, chondroid lipoma, lipoma with hibernoma, cellular angiolipoma, spindle cell/pleomorphic lipoma) may be confused with liposarcomas. Recent cytogenetic studies have reaffirmed the separate nature of many of the lipoma variants. Solitary lipomas commonly have rearrangements of chromosome 12, a finding not encountered in multiple lipomas or in spindle cell/pleomorphic lipomas. Liposarcomas are the most common adult soft tissue sarcoma; these tumours seldom arise from subcutaneous tissues or from preexisting lipomas and are rarely observed in children. Liposarcomas are associated with immature fat cells or lipoblasts. These cells have an eccentric, hyperchromatic nucleus that is indented or scalloped by the presence of one or more fat vacuoles. Because similar cells can be seen in a variety of nonlipomatous lesions (eg, silicone reactions), appropriate

histological background should be observed. Failure to apply strict criteria in identifying such cells can lead to the overdiagnosis of liposarcoma. Surgery is the treatment of choice for these giant swellings due to their size, tendency to recur and the potential hazard of malignant transformation. Another option for the treatment of these tumours is liposuction, if malignant potential can be excluded. A well-defined pseudocapsule is formed due to continuous pressure on the surrounding tissue, which makes the dissection and enucleation of these masses uncomplicated. Dead space created following dissection of a giant lipoma is usually drained using a suction drain to avoid the formation of hematomas or seromas. In the case reported in the present article, surgical excision resulted in complete relief of symptoms. The eventual pathological diagnosis of this mass was fibrolipoma with no evidence of malignancy. Because these tumours have a tendency to recur and can undergo malignant transformation, patients should be followed up for any recurrence in swelling or pain.

CONCLUSION

Lipoma represents the most frequent tumour of the soft tissues. Giant lipomas are a rare entity. This case underscores the importance of advanced imaging to differentiate lipoma from liposarcoma. Although reports of giant lipomas involving the Neck region have been documented, it's one of the rare case that we report as a lipoma of the Neck region of this magnitude. Surgery remains the treatment modality here also.

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CONFLICT OF INTEREST:

The authors declare that they have no conflict of interest.

STATEMENT OF HUMAN AND ANIMAL RIGHTS

All procedures performed in human participants were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. This article does not contain any studies with animals performed by any of the authors.

REFERENCES

1. Kransdorf MJ. (1995). Benign soft-tissue tumors in a large referral population: Distribution of specific diagnoses by age, sex, and location," *American Journal of Roentgenology*, 164(2), 395-402.
2. MESON H. (1991). Lipoma in clinical dermatology. *Clin Dermatol*, 4, 1-2.
3. M.H.A El-Monem, AH Gaafar and EA Magdy. (2006). Lipomas of the head and neck: Presentation variability and diagnostic work-up," *Journal of Laryngology and Otology*, 120(1), 47-55.
4. E Copcu and N Sivrioglu. (2005). Posterior cervical giant lipomas. *Plastic and Reconstructive Surgery*, 115(7), 2156-2157.
5. Enzinger FM, Weiss SW. (1988). Soft Tissue Tumors. St Louis: CV Mosby, 301-345.
6. Aydogdu E, Yyldrym S, Eker G, Akoz T. (2004). Giant lipoma of the back. *Dermatol Surg*, 30, 121.
7. Davis C Jr, Gruhn JG. (1967). Giant lipoma of the thigh. *Arch Surg*, 95, 151-6.
8. Vandeweyer E, Scagnol I. (2005). Axillary giant lipoma: A case report. *Acta Chir Belg*, 105, 656-7.



9. Wolfe SW, Bansal M, Heely JH, et al. (1989). Computed tomographic evaluation of fatty neoplasms of extremities. A clinical radiographic and histologic review of cases. *Orthopedics*, 12, 1351-8.
10. Fornage BD, Tassin GB. (1991). Sonographic appearance of superficial soft tissue lipomas. *J Clin Ultrasound*, 19, 215-20.

