

A Rare Case of Giant Lipoma of the Upper Extremity with Uncommon Presentation: A Case Report

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Abstract: *Although lipomas are common benign tumours of the soft tissues of extremities, giant lipomas are very rare. These giant lipomas grow very slowly and take years to attain their giant size. We excised a giant lipoma of upper extremity completely which is reported with a review so that prompt surgical treatment should be done without delay to save the extremity.*

Keywords: Extremity, Benign, Giant, lipoma

1. Introduction

Giant lipomas of extremities are very rare. Their hugeness leads to development of fearfulness in patient as well as in the treating surgeon. This can lead to delay in the treatment of such cases which can be disastrous to the patient. To enhance the awareness regarding such cases, we hereby present this case along with a short review.

2. Case Presentation

A 65 yr old patient had presented in surgery outpatient department of Jawaharlal Nehru Medical College, Ajmer, with a huge painful swelling in his right upper extremity involving the cubital fossa. The patient presented with history of pain, tingling numbness and difficulty in movement of his right elbow joint. Clinical examination revealed that it was a neglected case of large lipoma with ulceration. He had tingling in the areas supplied by the median nerve. The swelling was continuously enlarging for last 7 yrs. The mass was actually bilobed masses, one lobe measuring 15 cm × 19 cm and the other, 40×48 cm, with fungating ulceration over it. The smaller lobe was present above the cubital fossa and the larger lobe was extended till the wrist joint (figure 1). We planned limb saving surgery. The lipoma was found to encapsulate neurovascular bundle of the forearm and invested muscles, as confirmed by radiograph and electromyography. Complete excision of lipoma was done sparing all the major neurovascular bundles and muscles (figure 2 & 3). At the time of discharge, the patient was perfectly alright with normal functioning of his right upper extremity.



Figure 1: Showing appearance of giant lipoma preoperatively



Figure 2: Showing intraoperative images of lipoma



Figure 3: Showing right upper limb of the patient Kanaram after removal of giant lipoma

3. Discussion

A huge amount of literature is available addressing lipoma but still there is paucity in research work on giant lipomas. Lipomas are said to be one of the most common benign tumours of mesenchymal origin and are mainly composed of mature adipose cells.[1] They are generally referred as 'fibrolipomas' because of the presence of fibrous septae in them. Lipomas are also known as 'ubiquitous tumours' as they are found in almost all fat containing organs of the body.[1][2] Lipomas are the most frequent tumor of the soft tissues usually seen in females, obese patients; most commonly in the 5th to 7th decades. It has been documented in previous literatures that lipomas might result from a previous trauma but Giuseppe Nigri et al 2008 reported that the trigger mechanism is activated by cytokine and growth factors released after the trauma with increase in thromboplastin time (PTT).[3] Giant fibrolipomas of the upper extremities occur very rarely. They grow very slowly and symptoms are produced mainly due to their larger size, their site of origin and compression of adjacent neurovascular bundles.[1] Surgical excision usually leads to complete recovery from symptoms. Lipomas occur most commonly in the subcutaneous tissues but they have a tendency of intramuscular involvement both in the upper as well as lower extremities. [4][5][6][7] Lipomas are typically asymptomatic [8] and occur in approximately 1% of the population. A lipoma is said to be of excessive size when it is greater than 10 cms and its weight is more than 1 kg.[8] Other rare lipomas reported are 'Horse shoe shaped lipoma' of the upper extremity,[9] lipoma over the phalanx of index finger,[10] anterior sub acromial lipoma as an etiology of impingement syndrome [14].

Lipomas are documented as "one of the most innocent of tumours" by Svetoslav Slavchev et al 2012 as they usually grow slowly and do not infiltrate the neighbouring structures.[11] Lipomas actually arise from primordial adipocytes rather than from adult fat cells. Most frequent site of occurrence is at the back and in the extremities in the form of well-circumscribed, encapsulated subcutaneous movable masses which are round or ovoid in shape.[11][12][13]. They have a doughy feel and are freely mobile beneath the skin [18]. Till date, the treatment of choice for giant lipomas is surgical removal. They are easily excised completely because they are well encapsulated. Intralesional liposuction has also been documented as other modality of treatment which is associated with higher frequency of local recurrence and a higher risk of neural or vascular injury [15][16][17].

4. Conclusion

All the giant lipomas should be excised completely surgically because incomplete excision might have potential to cause liposarcoma and they may recur also. Proper clinical examination and imaging techniques to know the actual encroachment in the neurovascular bundle should be

performed preoperatively. Electromyography should be done to evaluate the neurological deficit. To conclude, this article might fulfill the gap in the original research work in this field.

5. Acknowledgement

The authors would like to thank entire staff of surgery department of JLN Medical College, Ajmer.

6. Conflict of Interests

The authors declare that they have no conflict of interests.

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