



## Recurrent Liposarcoma- Patient's Perspective

Authors

**Girish D Bakhshi, Rajesh G Chincholkar, Madhukar Gupta, Jasmine Agarwal,  
Prachiti Gokhe, Radhika Ramesh**

Department of General Surgery, Grant Government Medical College & Sir J J Hospital, Mumbai-400008

Corresponding Author

**Dr Girish D. Bakhshi**

Devneeti, Plot-61, Sector-7, Koper khairane, Navi Mumbai-400709, Maharashtra, India

Tel: - +91-9820218198, Email: [gdbakhshi@yahoo.com](mailto:gdbakhshi@yahoo.com)

### Abstract

*Soft tissue sarcomas may occur anywhere in the body. Three fourths are located in the extremities and the remaining 10 percent each in the trunk, wall and retroperitoneum with a slight male predominance. Soft tissue sarcomas become more common with increasing age with median age being 65 years.<sup>[1]</sup> Sarcomas over limbs may require amputation, however patients are not willing for losing their limb. Moreover, in evidence based medicine, patients choice has to be kept in mind. We present a case of recurrent LPS where wide local excision for recurrent LPS over left thigh was done as patient was not willing for amputation.*

**Key words:** *Liposarcoma, evidence based medicine.*

### Introduction

Liposarcomas (LPS) are the most common soft tissue sarcomas (STS). Its variants Myxoid and round cell occur a decade or two earlier than other variants, accounting for 10% of all the STS and 30–35% of all the LPS. It usually presents in the deep soft tissues of lower extremities, upper extremities, and trunk.<sup>[2,3,4]</sup> The well-differentiated type and most myxoid types have favorable prognoses, with 100% and 88% 5-year survival rates, respectively.<sup>[5]</sup> However, these tumors are poorly circumscribed and locally recur after incomplete excision. Although they rarely metastasize, repeated local recurrences may cause the tumor to evolve into a higher grade of sarcoma

or to dedifferentiate, in which case metastasis is possible.

### Case Report

A 60 years old male came with complaints of swelling over left thigh in the upper 1/3rd, which started to grow since 6 years and gradually progressed to present size. He had no functional or general symptoms associated with the affected limb. His past history revealed similar swelling at the same site 10 years ago for which excision was performed. No documents were available regarding previous surgery. Clinical examination revealed a 16x12 cm mass over left thigh, hard with restricted mobility and no left inguinal

lymphadenopathy. Pre-operatively, radiological and histopathological evaluation was done. Magnetic Resonance Imaging (MRI) was suggestive of a soft tissue mesenchymal mass in the inter-muscular plane, abutting the quadriceps and vascular plane. No local invasion noted (Fig. 1).

Tru-cut biopsy from left thigh mass was suggestive of liposarcoma, showing plump to spindle cells with hyper chromatic nuclei, singly scattered in myxoid stroma. Patient was explained that ideal treatment would be amputation in view of malignancy & recurrence. However, patient was not willing, hence, wide excision was planned.

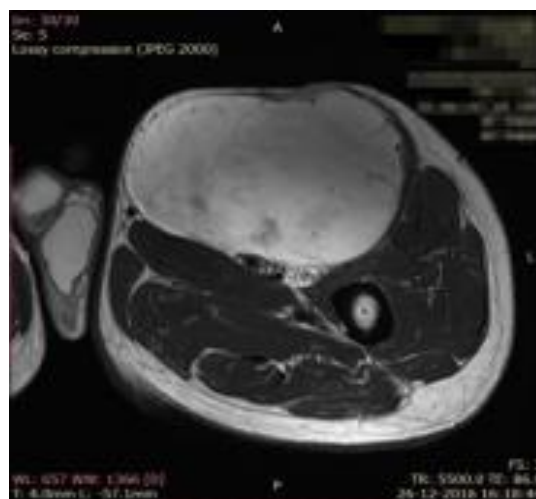
A elliptical incision taken over the mass and on dissecting the fascia, the mass was seen which was freed from all the surrounding structures (Fig 2). At the base the femoral artery and vein were adhered to the mass, where careful dissection was done to free the specimen.(Fig. 3). Skin flaps were raised from both sides and skin approximation was done without tension, keeping a corrugated rubber drain in the cavity. Suture line was healthy with a mild suture line dehiscence, which was allowed to heal with secondary intention.

Excised thigh mass was sent for histopathological evaluation, which on gross description revealed 22x15x7 cm single tissue. Externally, nodular bosselated with congestion.

Sections revealed a myxoid tumor with fibrocollagenous tissue. tumor comprising of plump to spindle cells, singly scattered in myxoid stroma. The cells had scanty cytoplasm with round to oval hyperchromatic nuclei. Fat vacoles and arborising vessels were present along with large cystic spaces filled with mucinous material. No evidence of mitosis/necrotic activity indicative of Myxoid Liposarcoma.

Post-operative period was uneventful. Patient was not willing for post op radiation. Patient was stabilized on full diet and discharged thereafter with follow-up advise for conservative management. The patient on follow up has a good quality of life and satisfaction with no residual

discomfort, no neurologic defect or recurrence in the last six months.



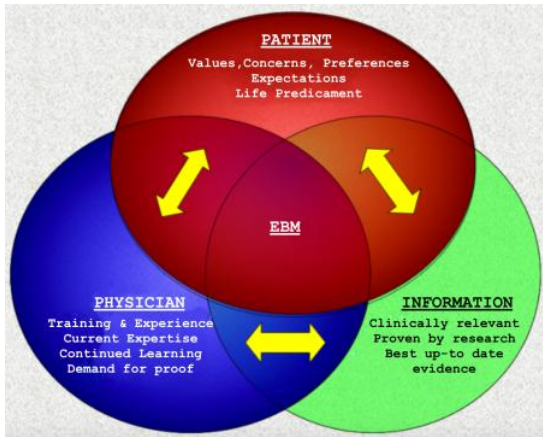
**Fig 1:** MRI was suggestive of soft mesenchymal multi-lobulated tumor in inter-muscular plane abutting the quadriceps and vascular bundle.



**Fig 2:** Visualizing the floor of tumor after excision liposarcoma, intraoperatively post excision. Femoral artery seen.



**Fig 3:** on gross examination thigh mass was nodular bosselated with congestion



**Fig. 4:** Evidence Based Medicine- Patient preferences and expectations

### Discussion

Liposarcoma is the most common malignant mesenchymal neoplasm in adults, classified in 5 subtypes, including well-differentiated, dedifferentiated, myxoid, pleomorphic and mixed liposarcoma. There are also reports that the intramuscular location of a lipoma is a risk factor for malignancy [5,6]. The lower extremities are one of the most common sites for liposarcomas [7,8]. In this site, when diagnosis of liposarcoma is sure, Campbell et al recommends wide excision or amputation if needed [9]. They have reported a high probability of recurrence (91%) secondary to conservative initial treatment. Some authors have reported that postoperative adjuvant radioterapy lengthens the median survival rate when surgical excision has not been adequate [6,7,9].

Liposarcomas have an increased predisposition of recurrence which generally becomes apparent more than six months after the surgery, but it may occur five, ten or thirty years later. The factors that increase the risk of local recurrence are age greater than 50 years, recurrent disease at the time of presentation, or a positive primary histological margin.

Prognostic outcome and management of such tumors has a strong correlation to the anatomical location. For subcutaneous location, a wide local excision is generally sufficient to minimize recurrence rates. However for large and deep-seated tumors, a radical excision remains the treatment of choice.

Literature outlines that large tumors, when resected by radical excision of the involved muscular compartment, show drastic reduction in recurrence rates, as compared to wide local excision, while compromising on limb functions. Wide local excision, though salvages the limb, still predisposes the patient to an increased risk of recurrence.

In present case, the tumor was localized without any bony/vascular invasion and a negative metastatic workup. Taking into account the patient's refusal for amputation, a wide local excision was performed successfully, allowing us to think that a slow growing, large liposarcoma can be managed by wide local excision, contrary to hip disarticulation which is advised in literature.

This case reiterates the basics of evidence based medicine that a treatment needs to be tailored as per patient choice and psychology, coupled with the best available modality. Treatments can no longer be merely disease oriented and must be coupled with patient needs and satisfaction. (Fig. 4). Treatment modalities need to step beyond evidence based research and need to be customized as per the patient convenience. Not only does this respect patient decision, it also has a positive impact in minimizing morbidity and mortality.

The case thus exemplifies the third and most important core in Evidence Based Management-Patient expectations and preferences, emphasizing the need to incorporate patient psyche in our treatment approaches.

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### References

1. Gustafson P. Soft tissue sarcoma. Epidemiology and prognosis in 508 patients. Acta Orthop Scand Suppl 1994; 259: 1-31

2. Nemanqani D, Mourad WA, Akhtar M, Moreau P, Rostom A, Ezzat A, et al. Liposarcoma: A clinicopathological study of 73 cases diagnosed at King Faisal specialist hospital and research centre. *Ann Saudi Med.* 1999;19:299–303.
3. Fritchie KJ, Goldblum JR, Tubbs RR, Sun Y, Carver P, Billings SD, et al. The expanded histologic spectrum of myxoid liposarcoma with an emphasis on newly described patterns: Implications for diagnosis on small biopsy specimens. *Am J Clin Pathol.* 2012;137:229–39.
4. Doyle LA. Sarcoma Classification: An update based on the 2013 World Health Organization Classification of Tumours of Soft tissue and Bone. *Cancer.* 2014; 120:1763–74.
5. Nishida Y, Tsukushi S, Nakashima H, Ishiguro N. Clinicopathologic Prognostic Factors of Pure Myxoid Liposarcoma of the Extremities and Trunk Wall. *Clin Orthop Relat Res.* 2010 May 25
6. Davis, C., Gruhn, J.G. Giant lipoma of the thigh. *Arch Surg.* 1967;95:151-6.
7. Dionne, G.P., Thomas, A.S. Infiltrating lipomas and angiolipomas
8. Celik C, Karakousis CP, Moore R, Holyoke ED Liposarcomas: prognosis and management. *J Surg Oncol* 1980; 14: 245-9.
9. Smith TA, Easley KA, Goldblum JR Myxoid/round cell liposarcoma of the extremities. A clinicopathologic study of 29 cases with particular attention to extent of round cell liposarcoma. *Am J Surg Pathol* 1996; 20: 171-80.
10. Campbell DA Jr, Eckhauser FE, Oehler JR, O’Leary T, Hart WR Liposarcoma of the lower extremity. *Surgery* 1980;88: 453-60