

Wide Excision of a Giant Lipoma of The Upper Arm: A Case Report

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Abstract

Introduction: A lipoma is the most typical mesenchymal tumor. Over time, lipomas can grow into substantial masses. **Case Presentation:** A 71-year-old woman complained of a mass in her upper right arm but reported no pain or discomfort. The mass is 13 x 11 x 6 cm in size. Histopathological analysis and a wide excision surgical approach were used. **Discussion:** A mass more than 5 cm in diameter is considered a giant lipoma. A differential diagnosis of liposarcoma can be made using a computed tomography (CT) scan or magnetic resonance imaging (MRI). The two surgical procedures of wide and marginal excision are typically used to treat lipomas depending on the size of the lipoma mass. The histopathological examination has an important role in confirming the diagnosis. **Conclusion:** The researchers describe a lipoma tumor with a large size in the upper arm after wide excision surgery.

Keywords: Lipoma, Giant Lipoma, Wide Excision

Introduction

Lipomas are the most frequent mesenchymal tumors, and they can appear anywhere on the body¹. The incidence of this illness has received little attention because lipoma seems asymptomatic and is more frequent in the proximal than the distal extremities.² A lipoma is a tumor with very slow growth that is considered to be giant if it is larger than 5 (five) cm.^{4,5}

Case Presentation

A 71-year-old woman visited the surgical polyclinic at the Purwokerto Islamic Hospital, complaining about a tumor in her upper right arm. The lump is more than three years old, uncomfortable, and painless. It began around the size of a chicken egg and gradually grew. The patient's family asserts that although she first refused to be admitted to the hospital, she eventually agreed after years of guidance from her children. The patient had no previous exposure to trauma, massage, or fatty foods. A palpable, moveable, soft, and painless mass was discovered during a medical examination. The

electrolardiograph, complete blood count, and chest X-ray showed no abnormalities.

The tumor was surgically excised using a wide excision technique (figure 2b) and measured macroscopically to be approximately 13 x 11 x 6 cm brownish-yellow rubbery (figure 2a). The tissue mass is delivered to the pathology division for analysis. A malignancy-free mesenchymal tumor composed of hyperemic, hyperplastic mature fat cells was discovered during the histopathological examination.

Discussion

Lipoma has not yet been linked to clear etiopathogenesis.⁷ Lipomas are infrequent in children and usually peak between 40 and 60. The most common locations are the back, shoulders, arms, anterior chest wall, and breast. Deep and superficial lipomas are the two subtypes of lipomas.^{3,8}

Examining can be seen as a radiolucent fat lump in soft tissue or even something that cannot be precisely described. Computed tomography (CT) and magnetic

resonance imaging (MRI) scans are both effective imaging modalities because they can identify lipoma masses, which are required for superficial or deep types with a size of >5 cm.^{2,4} However, an MRI scan is helpful for diagnosis and the potential for a liposarcoma differential diagnosis. This is crucial when dealing with cases of large masses since it affects the decision on the need for radiation therapy in addition to broad excision surgery.^{2,6,9}

Lipomas are typically treated surgically using one of two methods: wide excision or marginal excision, depending on the size of the lipoma mass. In the Kyoo-Yoon C study, the local recurrence rate using the marginal excision approach was higher than wide excision. This is because marginal excision allows tumor cells to be retained at the resection site, which could subsequently cause a local recurrence. Repeated resections are carried out in cases of recurrence.⁵

In this case, a mass in the upper right arm is being reported; for more than three years, there have been no complaints of pain or discomfort associated with the mass. We do not perform MRI tests because of the high costs involved. The care is provided utilizing a wide excision surgical technique to ensure the mass in the resection area will not recur in the future. The treatment produced a 13 x 11 x 6 cm reddish-yellow rubbery mass. A hyperplastic adult fat cell-based mesenchymal tumor that was larger, hyperemic, and free of malignancy following histological examination. This illustrates a good prognosis for patients.

Conclusion

A 71-year-old woman with a huge lipoma mass on her upper arm underwent surgery due to the size of the lipoma and to lower the chance of recurrence in the resection area. A mesenchymal tumor composed of hyperemic hyperplastic mature fat cells was identified through histopathological examination, however, there was no sign of malignancy.

References

1. Chenicheri B, Dhiren N, Anila B, Thomas P. Giant lipomas of The Upper Extremity: Case Reports and a Literature Review. *Can J Plast Surg.* 2012;20:3-e40
2. Christopher NJ, Alice SH, Eleanor C, Darin D. Lipomatous Soft-tissue Tumors. *J Am Acad Orthop Surg.* 2018;26(22):779-788.
3. Denoshan S, Karuppiah K, Jonathan C, Adel T. Intercompartmental Giant Lipoma of The Arm: a Case Report. *Chinese Orthopaedic Association and Wiley Publishing Asia.* 2015;7:74-76
4. Eristan NN, Bambang S, Yana S. Giant Intramuscular Lipoma in Biceps Brachii Muscle: a Rare Case. *Jurnal Radiologi Indonesia.* 2017. 2(2).
5. Kyoo-Yoon C, Evan J, Lloyd M, Antione B. Surgical Management of Truncal and Ekstremities Atypical Lipomatous Tumors/Well-Differentiated Liposarcoma: a Systematic Review of The Literature. *The American Journal of Surgery.* 2020 ;219(5):823-827.
6. Radivojcevic U, Ilic BM, Vulovic DD. Giant hand Lipoma – Case Report of a Rare Localization of a Common Type of Tumor. *Sanamed.* 2016; 11(2): 141-144.
7. Sancar S, Ugur T, Engin K, Hacı BT. Giant Lipoma of The Upper Back: a Case Report. *Our Dermatology Online.* 2015;6(4):447-449.
8. Soo JW, Ki YH, Hak C. Giant Ventral Lipoma of The Neck. *The Journal of Craniofacial Sugery.* 2020;31:5-e501
9. Wahyu W, Wildan L, Dina A. Well-Differentiated Liposarcoma Disguised as a Recurrent Lipoma of The Foream Compartement: a Case Report. *International Journal of Surgery Case Reports.* 2020;72:91-95

Appendix



(Figure 1). A palpation examination revealed the lumps that were mobile, soft, and painless.



(a)



(b)

(Figure 2). (a). The lipoma mass measures 13 x 11 x 6 cm. (b). Wide Excision