

Giant Lipoma of the Thigh

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A sixty-two-year-old obese female presented with a swelling in the medial aspect of her thigh for 6 years. The swelling was increasing in size and limiting her mobility. The swelling was painless and did not show any signs of inflammation. Based on the clinical presentation, a diagnosis of lipoma was made. MRI revealed subcutaneous tissue thickening with thickening of the fascia deep in the medial aspect of the thigh. No extension was found in the muscular layer. Excision of the lipoma was performed and 4 kg lipoma was excised. Her postoperative recovery was uneventful. The histopathological report revealed lobules of mature adipose tissue with focal areas of fat necrosis, inflammatory infiltrate, lymphoid follicles, and dermal fibrosis were consistent with lipoma. The patient is currently on regular follow-up.

Relieving the symptoms in a patient with giant lipomas should be the priority. In addition, it is important to rule out any malignancy, which although rare, should not be missed.

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Lipomas have been reported to be more common in females. Although benign, they can be very debilitating, especially if they reach a considerable size. They are usually located in subcutaneous areas; however, they can also appear in the distal and intramuscular planes. It is important to differentiate between lipoma and liposarcoma; this can be difficult clinically. Ultrasound, CT scan, MRI scan, and histopathology could confirm the diagnosis. CT can help in diagnosing the location and the invasion of the tumor and can differentiate from other malignant tumors. However, MRI is more specific, especially regarding diffuse T1 intensity. Histopathological diagnosis is confirmatory. Complete excision in a deep lesion may be a difficult procedure, but it is the best measure to relieve the patient's symptoms.

The aim of this presentation is to report a giant lipoma, which has been successfully excised.

THE CASE

A sixty-two-year-old obese female presented with a painless swelling in the medial aspect of her thigh for 6 years. The swelling was increasing in size. She had difficulty walking, especially for considerable distances. The swelling increased during the year before the presentation. The patient was fatigued and had limited mobility; she had no inflammatory signs and symptoms. She was neither jaundiced nor pale on general physical examination. The cardiovascular system was normal.

Examination of the left limb revealed a huge, globular, diffuse lump involving the anteromedial aspect of the left thigh, measuring approximately 35x30 cm, see figures 1 and 2. On palpation, the mass was non-tender with normal skin temperature. It was not attached to the underlying tissues, but the overlying skin showed dimpling and redness. The mass was firm in consistency with no compression signs. There was no bruit heard over the mass. There was no inguinal

lymphadenopathy. Based on the clinical presentation, a diagnosis of lipoma was made.

Hematological investigations were within normal limits. MRI showed subcutaneous tissue thickening with thickening of the fascia deep in the medial aspect of the thigh, see figure 3. No extension was found in the muscular layer. Excision of the lipoma was performed under general anesthesia and a lipoma of 4 kg was excised, see figures 4 and 5. Her postoperative period was uneventful and was stable at discharge. Macroscopy revealed a huge and well-encapsulated mass measuring approximately 33.5x23 cm. Histopathology revealed lobules of mature adipose tissue with focal areas of fat necrosis, inflammatory infiltrate, lymphoid follicles, and dermal fibrosis consistent with lipoma, see figure 6. The patient was discharged on the 5th postoperative day. The drain was removed after 1 week. She is currently on a regular follow-up.



Figure 1: Left Thigh Lipoma

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Figure 2: Left Thigh Lipoma with Dimensions



Figure 3 (A)



Figure 3 (B)

Figure 3 (A-B): MRI Images

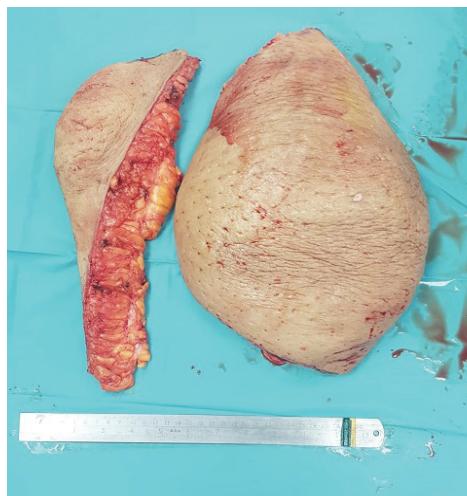


Figure 4: Excised Lesion with Dimensions

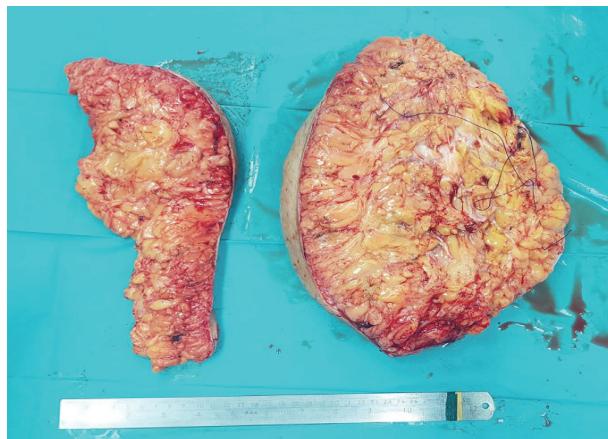


Figure 5: Excised Lesion Showing Fatty Tissue

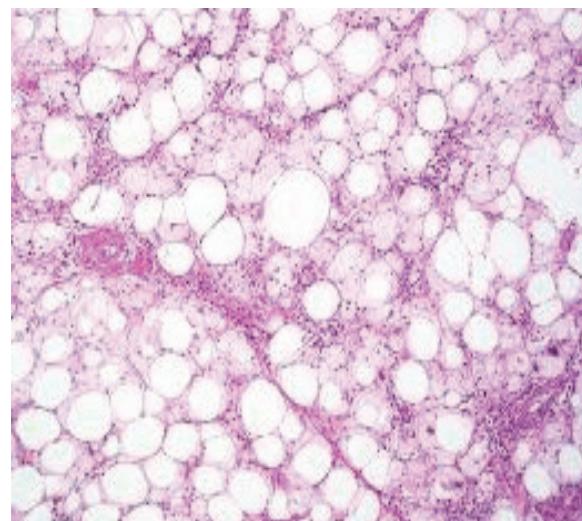


Figure 6: Histopathological Slide Showing Adipose Tissue

DISCUSSION

Lipomas, although benign, can be debilitating especially if they reach a considerable size¹. Giant lipomas are typically mesenchymal tumors located in the deep body plane. The mechanism for their uncontrolled growth remains unclear. Large lipomas have been reported in the literature². Such lipomas may be found in any part of the body, though they are extremely rare. When located in the limbs, giant lipomas may cause functional limitations due to excessive size and weight or lymphedema, pain, or nerve compression syndrome³.

Phalen et al found that lipomas causing nerve compressions are rare⁴. It is important to differentiate between lipoma and liposarcoma. Malignant lesions, such as high-grade liposarcoma show no destruction of fat planes and they can present as infiltrative growth. The MRI can be helpful in distinguishing benign lipomas from malignant liposarcomas⁵. Surgery is the treatment of choice to confirm the benign nature and extensive resection may be needed to avoid recurrence. The histological examination can show adipose tissue, which is diagnostic of a benign neoplasm of fat tissue.

CONCLUSION

Relieving the symptoms in a patient with giant lipomas should be the priority. Weakness, aching, or limited mobility is due to mechanical interference with the muscles. Surgical excision is the treatment of choice to relieve the symptoms. The surgery can be challenging. In addition, it is important to rule out any malignancy, which, although rare, should not be missed.

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