Recurrent Large Cervico-Axillary Lipoma in a 2-Year-Old Boy: Case Report

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Citation

Abstract
Lipomas are the most common subcutaneous soft-tissue tumors of mesenchymal origin and have an overall recurrence rate of 5%. The axillary region is an unusually reported localization for lipomas. We report a huge recurrent cervico-axillary lipoma in a 2-years-old boy, which, to our knowledge and according to a review of English literature, has not been reported before in children. This benign lesion needs careful and meticulous complete surgical excision to avoid recurrence.

INTRODUCTION
Lipomas are the most common subcutaneous soft-tissue tumors of mesenchymal origin; the estimated annual incidence is one per 1,000 persons (1) and the overall recurrence rate is 5% (2). The axillary region is an unusually reported localization for lipomas (3).

CASE REPORT
A 2-years-old boy was referred from another hospital with recurrent left cervico-axillary lipoma that had been excised at the age of 12 months. Computerized tomography revealed a large lobulated fatty-density lesion with septation in the left axilla, extending to the left supraclavicular area, measuring 10.3 x 5.1 x 3.9cm. On examination, he was a healthy, active, asymptomatic boy with a subcutaneous, huge, lobulated (10 x 7cm), non-tender, left axillary soft tissue swelling with ill-defined superior-medial edges and the scar of previous surgery {Fig. 1}.

Figure 1
Fig. 1: Preoperative view of the patient with left axillary swelling and scar of previous surgery.

Ultrasonography (US) was highly suggestive of lipoma: diffuse homogeneous soft-tissue mass and no enlarged lymph nodes {Fig. 2}.
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**Figure 2**
Fig. 2: US showing a diffuse homogeneous soft-tissue mass

Through the same incision, the mass was dissected from the axillary vessels up to the axillary apex and by applying left supra-clavicular pressure the extension of the lipoma was delivered from under the pectoralis minor muscle {Fig 3}.

**Figure 3**
Fig. 3: Shows the lesion intraoperatively, in relation to the axillary vessels.

It was excised completely in one block, measuring 12 x 7 x 5cm and weighing 350g {Fig 4}.

**Figure 4**
Fig. 4: The mulilobulated yellowish specimen, resected in one block (350g).

The patient had an uneventful recovery. Histopathological examination confirmed the diagnosis of a huge simple benign lipoma. After 8-month outpatient clinic follow-up, no recurrence was observed.

**DISCUSSION**

Adipose tumors account for only 5% of soft-tissue tumors in children, of which 95% are benign (4). Superficial lipomas are smaller than 5cm in 80% of cases, with only 1% of lesions greater than 10cm in size (5).

Lipomas most frequently affect the upper back, neck, proximal extremities (particularly the shoulder), and abdomen (5). The axillary region is an unusually reported localization for lipomas; this relatively low frequency of axillary lipomas is probably underestimated due to the fact that most of the lipomas of the axilla are more classical in their size and then escape to scientific reports (3).

It is unclear if a soft-tissue lipoma represents a benign neoplasm, a local hyperplasia of fat cells, or a combination of both processes (5). The mechanism of uncontrolled growth of such lipomas remains unclear. However, it was proposed that after a blunt trauma, rupture of the fibrous septaes (preventing migration of fat) accompanied by tears of the anchorage between the skin and the deep fascia may result in local proliferation of adipose tissue (3). The injury from the first operation and also failure of complete removal of infiltrating extended cervico-axillary lipoma may explain the recurrence of this lesion.

A major concern facing a giant lipoma should be to rule out malignancy; however, such a transformation for cutaneous lipomas is exceedingly rare (3). The clinical examination,
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US, previous CT scan and benign features on previous surgery satisfied us.

Recently, suction-assisted lipectomy and liposuction have been reported as effective treatment of giant lipomas. However, large haematomas and recurrence caused by incomplete removal of the neoplasm are possible complications (3). Also no such report was met in this age and in this location. We believe that complete surgical excision, especially in the axillary area, is the optimum to avoid local recurrences.

CONCLUSION

Huge recurrent axillary lipomas are very rare in small children; this benign lesion needs careful and meticulous complete surgical excision to avoid recurrence.

References

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