Acta chir belg, 2005, **105**, 656-657

Axillary Giant Lipoma : a Case Report

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Key words. Lipoma ; surgery ; neoplasm ; tumour ; axilla.

Abstract. Lipoma are the most frequent mesenchymal soft tissue tumours but rarely present huge sizes in their cutaneous localization. Some cases of so-called “giant lipomas” have been reported in the literature and here is presented a giant lipoma of the axillary area which is, to our best knowledge, the second report of such a giant lipoma in this localization.

Introduction

Lipomas are the most common mesenchymal tumors (estimated incidence 10%) (1). Their growth is usually insidious and limited. Most of them have a diameter of about 2 cm and rarely grow beyond 10 cm (2). However, these benign tumours may occasionnally enlarge rapidly and become huge (2). Deep lipomas can grow to very large proportions before producing symptoms ; gigantic retroperitoneal lipomas weighting more than twenty kilos have been reported (2).

The largest cutaneous lipoma ever reported occurred in the left scapular area (3).

We report a large lipoma of the axilla which, to our knowledge, is the second largest reported in this localization.

Fig. 1
Clinical view of the axillary giant lipoma

Case report

A 62-year old woman presented with an axillary soft tissue mass that had been enlarging for six years. The lesion was asymptomatic (Fig. 1). Physical examination revealed a painless, non-tender soft mass filling the axillary extension of the left breast (Fig. 1). No skin changes or dimpling were present and neurological examination of the left upper extremity was normal.

Ultrasonography revealed a well delineated homogeneous soft tissue mass, with no involvement of the axillary neurovascular bundle. No breast pathology was observed, both on clinical and radiological examination.

The patient was operated on under general anaesthesia. A skin ellipse was resected to avoid skin redundancy after mass removal. The lesion was well delineated and could be completely excised (Fig. 2) the specimen weighted 960g and measured $16 \times 15 \times 5$ cm.

Histological examination of the specimen confirmed a benign lipoma. Postoperative course was uneventful and no recurrence was observed at one year.

Fig. 2
Macroscopic view of the resected specimen (960 g)

Discussion

Most lipomas are small, weighting only a few grams. They are the most frequent benign mesenchymal tumours with an estimated incidence of nearly 10% (1). Considered "one of the most innocent of tumours", lipomas rarely cause symptoms. However, large internal lipomas can produce abdominal pain, kidney failure or other systemic complications and may undergo sarcomatous transformation (2). In contrast, cutaneous lipomas are primarily a cosmetic problem but occasionnally can cause functional limitation or lymphoedema (2).

The axillary region is an unusual reported localization for lipomas. In 1996, De Andrade *et al.* presented experience with 31 cases of axillary masses (4). Patients with breast or upper limb diseases were excluded of this study. Only one patient in this paper had an axillary lipoma (4).

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. Nevertheless, giant lipomas of the axilla remain really unfrequent.

The axillary region is a specific localization for hibernoma that is a rare soft tissue tumour of brown fat differentiation (5).

The mecanism of the uncontrolled growth of such lipomas remain unclear. However, it was proposed that after a blunt trauma rupture of the fibrous septaes (preventing migration of fat) accompagnied by tears of the anchorage between the skin and deep fascia may result in local proliferation of adipose tissue (6). Since axillary region is one of the most moveable of the body it can be exposed to microtraumas with each mouvement of the upper limb (6, 8).

On the other hand, axillary "swellings" could be of mammary origin, either by direct extension of the mammary gland itself or by secondary invasion by a malignant breast disease. Facing an axillary tumour, breast screening is, of course, mandatory to rule out a benign anatomical variation of mammary gland extension, axillary surnumerary mammary gland or axillary involvement with malignant breast disease. In such cases, complete senological investigation should be performed, including clinical bresast examination, classical mammography, ultrasonography (covering the entire axillary region) and eventually biopsy.

A major concern facing a giant lipoma should be to rule out malignancy ; however, such a transformation for cutaneous lipomas is exceedingly rare (2).

The treatment of giant lipoma is complete surgical excision.

Recently, suction-assisted lipectomy and liposuction have been reported as effective treatment of giant lipomas (7). However, large haematomas and recurrence caused by incomplete removal of the neoplasm are possible complications of liposuction in such an indication (7).

Surgical excision is still preferable, especially in the axillary area where large vessels and nerves could be engulfed by the neoplasm (7-8).

A previous case report of a giant lipoma of the axilla was presented by Copcu in 2004 : the lesion weighted 1820 g (8).

The present case is the second report of a giant lipoma of the axilla.

In conclusion, giant axillary lipomas are rare conditions preferably treated by surgical excision to avoid damage to large vessels or nerves and to offer a better control on local recurrences.

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