GIANT LIPOMA OF THE BACK OF THE THIGH
WITHOUT SIGNS OF NERVE COMPRESSION. A CASE STUDY.

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Abstract:

Lipoma is a fatty tissue that appears as a slow-growing mass and they not cause serious symptoms, depending on its size and location.

Lipomas can be present in any part of the body rich in adipose tissues such as thigh, shoulder, trunk, etc., although they are usually appear in a small mass.

This paper presents the case report of a 49-year-old patient with a giant lipoma in the right thigh for 7 years focusing on its location, size and surgical treatment.

Keywords: benign tumors, lipoma, surgical treatment.
الملخص:

الورم الشحمي هو ورم الأنسجة الدهنية يظهر ككتلة بطيئة النمو لا تسبب أعراض خطيرة بالنظر إلى حجمه ووقعها.

تشير ورقتنا البحثية إلى تقرير حالة مريض يبلغ من العمر 49 سنة يعاني من ورم شحمي عملاق في الفخذ الأيمن لمدة 7 سنوات مع التركيز على موقعه وحجمه وعلاجه الجراحي.

الكلمات المفتاحية: الأورام الحميدة، الورم الشحمي، العلاج الجراحي.

INTRODUCTION:

Soft tissue tumors include benign and malignant lesions developed from connective tissue and its differentiated varieties. The tumor pathology of the musculoskeletal system represents a difficult entity both from the diagnostic and from the therapeutic point of view. Their diagnosis must be based on an imaging balance and a biopsy prior to any act.

We report a case of a large mass sitting on the back of the thigh investigated and operated.

MATERIALS AND METHODS:

We received a 49-year-old patient B.F. at the specialized consultation, operated on for a voluminous angioma of the left thigh and who presented a cold swelling of the posterior face of the right thigh, progressively
increasing in volume, initially painless and then becoming quite annoying with a slow evolution over the last seven years. This motivated the patient to consult. All evolving in a of the general state context of conservation.

An MRI was requested revealing a voluminous oval fat mass well limited of the posterior side of the right thigh measuring 155/100/78mm, developed within the hamstring muscles, of fat signal containing intra-matrix septas whose appearance is doubtful and poses a a diagnostic problem requiring surgical biopsy, which was carried out with a pathological study in favour of a giant lipoma displacing the neighbouring structures without signs of nerve or vascular damage, however without eliminating a very well-differentiated liposarcoma of low grade of malignancy. The indication for excisional biopsy was posed.

**Fig.1** : Giant lipoma of the posterior thigh
Fig. 2-3: CT scan shows a well-limited deep oval hypodense tissue formation 156 mm in length, straddling the hamstring muscles with a fat content of more than 85%, heterogeneous by the presence of thin septa.
**Fig. 4-5**: The MRI examination revealed a large, roughly oval formation of 155/100/78 mm, the posterior side of the right thigh developed at the expense of the hamstring muscles, of predominant fat signal, containing intra-matrix septas enhanced after injection, with thin and thick partitions without well-circumscribed and visible tissue mass.

**RESULTS:**

The patient was thus admitted in our department where we performed a posterior abdomen biopsy in italic S (tumour-centered) that confirmed the MRI result. Excision of the tumour in its totality according to a plan of cleavage that removes the scar from the biopsy while respecting the anatomical elements of the thigh that were repressed, in particular the sciatic nerve that was in contact with the mass. The lipome weighed 750 grams and was 16x10 cm. the post-operative follow-up was favorable, without any neurological disorders, The aesthetic result was considered satisfactory and no functional impairment was noted postoperatively.

The anatomopathological study of the surgical specimen showed a nodular lesion made up of a benign cellular proliferation arranged in layers of regular fat cells. These layers are crossed by thin fibrous trabeculae vascularised in favour of a lipoma with no sign of malignancy.
**Fig. 6**: Posterior approach centered on the mass in S italic bearing the biopsy scar.

**Fig.7**: Pre-operative appearance of the giant subaponeurotic lipoma. The dissection was careful and performed according to a cleavage plan while respecting the anatomical elements of the thigh.
**Fig. 8**: The mass was in intimate contact with the sciatic nerve (the S.N was healthy and continuous)

**Fig. 9-10**: The mass measuring approximately 15.5 cm by 10 cm, encapsulated, soft with a yellowish appearance and weighing approximately 750 g was sent for anatomo-pathological study.
DISCUSSIONS:

Lipomas are the most common benign mesenchymal tumors, formed by greasy lobules from mature fat tissue, usually of small size and whose exact etiology is not yet elucidated.

Lipomas are described as giant when their size exceeds 10 cm or when they weigh more than 1000 g. Because of their excessive size and weight, and because of their anatomical situations at the level of the limbs in the inextensible compartments, they can compress vasculo-nerve structures and lead to a limitation of mobility, lymphoma or compressive pain syndrome. Furthermore, they present a not neglected risk of sarcomatous transformations and may give rise to confusion with the low-grade liposarcoma still called (well differentiated liposarcoma-like).

An initial radiological check-up including a standard X-ray, an ultrasound and then an MRI, compulsorily supplemented by a biopsy will make it possible to make the diagnosis and avoid inappropriate treatment.

MRI, because of its high sensitivity, is an interesting contribution to the diagnostic orientation of soft-part tumors.

The preoperative biopsy is the only examination that can reliably diagnose lipoma. At the end of this initial check-up, malignancy is suspected when the lipoma is larger than 5 cm, deep in the body and has septae.

The best treatment for giant lipomas is surgical excision: this allows complete removal of the lipoma and prevents recurrence.
The resection should be wide enough and that significantly reduces the risk of local recurrence.

The evolution of giant lipoma after surgical removal is generally favourable. Recurrence is exceptional after complete resection.

**CONCLUSION** :

- When faced with a giant lipoma, the first diagnosis to be systematically eliminated is a well-differentiated liposarcoma.
- Surgical biopsy is always recommended before radiological examinations which can in no case affirm the diagnosis of benignity of the mass with certainty, but also in case of presumption criteria making suspect a malignant tumor as was our case.
- Surgical resection remains its reference treatment. Postoperative monitoring is the rule to exclude local recurrence, or even malignant degeneration.

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