

## Case Report

# The Spindle Cell Lipoma of the Thigh Simulating a Liposarcoma to the Imagery

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## Introduction

Fusiform cell Lipoma is a rare entity of benign fat tumors [1]. Characterized by the presence of fusiform cells forming collagen [2,3], and can be confused with fusocellular component Liposarcoma [4,5], affecting mainly the young male between 45 years and 65 years, with preferential seat under posterior neck and shoulder area and 13% atypical localization [6].

Here we report the case of a patient supported in our formation for Lipoma with fusiform cells of the left thigh.

## Case Presentation

It is a patient of 46 years without significant pathological history, who consults for a subcutaneous swelling of the infero-internal region of the left thigh, progressive onset and evolving for 6 months; it is a painless mass with firm consistency, movable in relation to the skin plane and adherent to the deep plane, of 8 cm of large axis. The patient benefited from an ultrasound that showed a very limited, subcutaneous ovalar formation with regular contours, of a heterogeneous tissue echostructure, respecting the adjacent muscular plane, simulating a Liposarcoma. MRI has objectified the presence of a superficial mass, measuring 50 × 43 × 21, very limited, with regular contours, in hypo signal T1 et hyper signal T2; with T1 and T2 hyper-signal zones. This mass is increased after injection of gadolinium, without muscular, bone or ligamentous lesions. First evoking a Liposarcoma (Figure 1,2). A surgical biopsy was performed whose anatomopathological result was in favor of a fusiform cell Lipoma. The patient has benefited a surgical resection of the tumor mass.

The anatomopathological study objectified an 8.5 × 2.5 cm tumorectomy piece surmounted by a 7.5 × 2cm skin flap (Figure 3) showing a yellowish-white appearance of elastic consistency passing flush with the deep plane and at a distance from the boundaries Side.

Histological examination showed tumor proliferation made of a

## Abstract

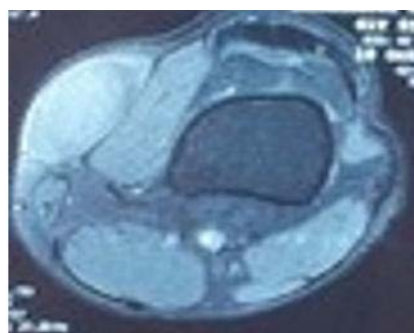
The Fusiform cell Lipoma is a rare entity of benign adipose tumors. Characterized by the presence of fusiform cells forming collagen, and can be confused with the fusocellular component Liposarcoma.

We report the case of a patient aged 46 years supported in our formation for a subcutaneous mass of the infero-internal region of the left thigh, whose appearance at ultrasound and MRI evokes at first a Liposarcoma. It is the histological and immuno-Histochemical examination that allows the confirmation of the diagnosis.

**Keywords:** Spindle cell lipoma; IRM; CD34

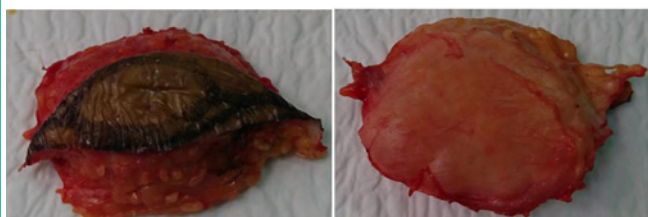


**Figure 1:** MRI of the knee in frontal and sagittal section passing through the tumor.

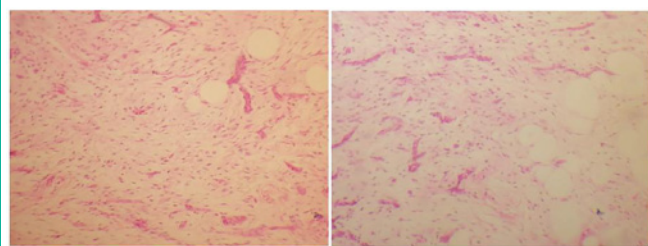


**Figure 2:** MRI of the knee in axial cut passing through tumor.

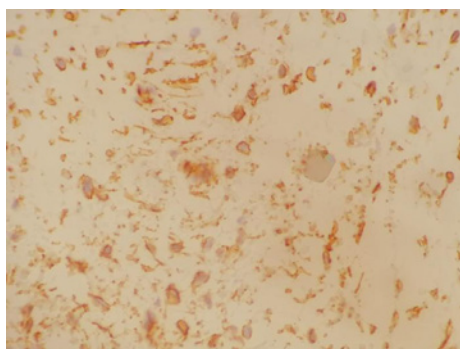
double fusiform and Adipocyte component. The fusiform contingent is made up of cells with elongated ovoid nuclei with no atypical or mitosis, mixed with numerous Collagenous beams with an anarchic disposition. The second component is made up mainly of mature adipocytes free from cytonuclear atypies (Figure 4). An immuno-Histochemical study was carried out, showing positive staining of



**Figure 3:** Macroscopic aspect of the resection piece showing healthy exeresis margins.



**Figure 4:** Histological aspect showing a benign Fibro-adipocyte tumor proliferation G × 20.



**Figure 5:** Immunohistochemically study showing positive labeling of fusiform tumor cells by anti-CD34 antibody.

fusiform cells by anti-CD34 antibody (Figure 5).

## Discussion

Described by ENZINGER and HAWLEY in 1975 as a separate entity. Taking the appearance of a benign subcutaneous nodule, well limited, sometimes encapsulated and rarely infiltrating the underlying muscle; most often unique [7].

It is a rare tumor that accounts for about 1.5% of all lipomas [8] which mainly affects male subjects, beyond 40 years. For Syed and al. [9] male predominance is related to the frequent detection of androgen receptors in this tumor.

The fusiform-cell Lipoma develops mainly in the cervical region, back and shoulders [10]. Other unusual locations can be seen in the face, oral cavity, pharynx, tongue, temporal region, Parotid gland, orbit, scalp, and extremities.

The clinic of these tumors is poor; the most frequent sign of appeal is the perception by the patient of a mass most often superficial, with slow and painless evolution [11,12]. The average diameter is 4 to 5

cm [3].

Imaging can evoke a Liposarcoma. It presents itself as a very limited mass of small size (less than 5 cm) with a typical adipose quota but also containing a non-specific appearance fabric. [13].

Histologically, there are three characteristic components: mature adipocytes, fusiform cells, no atypia, no mitosis, arranged in short bundles, mixed with cells and short trousselets of thick Collagenous fibers. In the predominant form of fusiform cells, adipocytes are rare. Rarely, vascularization is predominant and can orient to a vascular tumor. The CD34 is positive in the fusiform cells, which are otherwise S100 negative [4,5].

There are several histological variants of fusiform cell Lipoma; including Pleomorphic cell Lipoma, described by Schmookler and Enzinger in 1981. Characterized by the presence of giant cells, comprising several nuclei arranged in rosettes (floret-like giant cells) [14]. Other variants containing little or no adipocytes whose diagnosis can be very difficult are described in particular [15].

The presence of anastomotic spaces with projections of connective tissue makes it possible to distinguish another variant of the fusiform cell Lipoma: it is the pseudoangiomatous form, described in 1994 by Hawley and al [10,16].

Cytogenetic analysis revealed a loss of material from the long arms of chromosomes 13 or 16 [17].

In the case of Pleomorphic cells, the differential diagnosis remains the atypical adipose tumor and the well-differentiated Liposarcoma. It is the Immunohistochemistry and the fish analysis which make it possible to distinguish each entity, with an overexpression of MDM2/CDK4 in Liposarcoma. Myxoid Liposarcoma can be evoked in front of a predominance of the myxoid component, but as a rule the seat of this tumor is deep with negative CD34. The FISH analysis shows a rearrangement of the DDIT3 gene [17].

The surgical treatment consists of the complete removal of the tumor under pain of a recurrence [18].

The prognosis of these lesions is usually good, without recurrence if the initial excision is complete [1].

## Conclusion

Fusiform cell Lipoma is a rare entity of benign fatty tumors with good prognosis, often unique and well-limited [2,3]. Imaging does not establish a diagnosis of certainty that can only be histological [19].

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