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CASE REPORT

A Rare Case Report of Pedunculated Fibrolipoma in Thigh with Review of Literature

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ABSTRACT

Fibrolipoma is one of the rare variants of the lipoma, and very few cases have been reported in the thigh. These lesions are generally painless, but can grow to large size due to malignant transformation to liposarcoma. Surgical excision is the treatment of choice. The prognosis is generally good as recurrence rate is very less if adequate excision is done. In old age patient, risk of malignant transformation is very high leading to early excision. Here, we present a case of fibrolipoma in thigh in 57 year old female and its further management.

KEYWORDS : Fibrolipoma, Thigh Neoplasm, Excision.

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INTRODUCTION

Lipomas are the most common benign mesenchymal neoplasms consisting of mature adipocytes, generally enclosed by a thin fibrous capsule that are generally located sub dermally. Mostly, lipomas are present in subcutaneous planes, but they may involve fascia or deeper muscular planes. [1] Etiology of lipomas can be mechanical, endocrine, and inflammatory influences, triggering the differentiation of multipotent mesenchymal cells in fat tissue. [2] These tumours may arise in any location in which fat cells are present. The majority of the lipomas occur in the upper half of the body, particularly the trunk and neck, though they may also occur in other sites of the body. Most patients affected by lipomas are in their 5th or 6th decade of life, but children can also be rarely affected. Microscopically, they are composed of mature adipose tissue without any cellular atypia that shows the benign nature of this lesion. [3]

CASE REPORT

A 57 year old female presented to us in orthopaedics OPD with an enlarging, pedunculated globular, solitary, soft, mass on the right thigh on its anteromedial aspect in upper one third of right thigh. The swelling was attached to the thigh with a stalk. Mass was first noticed 6 months back. The swelling was initially peanut in size that gradually increased in size over 6 months to its present size of 11.5x9 cm. The swelling was spontaneous in onset and was not preceded by any type of injury, trauma or radiation exposure. A detailed clinical examination was done to assess the general condition of the patient, status of the neighbouring joints and presence of any associated injuries or lesions. On physical examination, the swelling was painless, non compressible and non reducible. Transillumination test was negative and no neurovascular deficit was associated with the swelling. The swelling had irregular surfaces with variable consistency. There were no dilated veins present over the swelling. The swelling was non fluctuant in nature. There were no scar or sinus associated with the swelling. There was presence of black necrotic patch over the swelling. The swelling was non tender and there was no local rise of temperature over the swelling. No visible pulsations were noted over the swelling. The swelling was pedunculated as it was hanging from the anteromedial aspect of the thigh with a stalk. No bony irregularity was noted.



Fig 1: Intraoperative photograph showing swelling clinically on anteromedial aspect of thigh

Xray of the affected thigh and MRI scan was done preoperatively to locate the extent of the swelling, extraosseous extensions and involvement of neurovascular bundle. MRI report was suggestive of a large well defined exophytic lesion with patchy areas of signal suppression on STIR arising from the skin on anteromedial aspect of thigh with small stalk like cutaneous attachment with few prominent vessels leading up to it- likely benign soft tissue tumour. No definitive connection to deep vessels was seen on MRI though few prominent superficial vessels were seen in subcutaneous plane adjacent to cutaneous attachment of lesion. Routine laboratory investigations e.g. complete hemogram, bleeding time, clotting time, blood urea, blood sugar, serum electrolytes, urine complete examination, ECG and chest x-ray was done for pre anaesthetic evaluation and preoperative planning for surgical excision.

Patient was taken up for excision biopsy under regional anaesthesia. The swelling was completely removed along with its stalk and mass was sent for histopathological examination. We excised the pedunculated thigh fibrolipoma by an elliptical incision and the excised mass was 11.5x9 cm in size. Patient was discharged from the hospital in stable condition. Sutures were removed on 14th day after surgery. Post op follow up of the patient was uneventful without any recurrence.

DISCUSSION

Lipomas are the most common benign soft-tissue tumours. Often, they are diagnosed clinically and usually left untreated so their true prevalence is difficult to establish accurately. Since the lipomas usually don't cause any discomfort to the patient except for visually disturbing cosmetic appearance, they usually don't get adequate treatment and remain neglected.



Fig 2: Preoperative Xray



Fig 3: Preoperative MRI showing swelling along with its stalk



Fig 4: The excised specimen along with its stalk that was sent for histopathological examination

The recurrence rate after the treatment has been reported between 3- 62.5% in the literature. [4,5] No particular signs and symptoms are observed with lipomas usually, but giant lipomas may hamper activities of daily living and may cause several health problems due to local pressure effects. [6] There are many subtypes of lipomas, including fibrolipoma, angiolipoma, myxoid lipoma, spindle cell lipoma, pleomorphic lipomas, and intramuscular lipomas. [7] In our patient the final biopsy report of the mass showed features suggestive of fibrolipoma with focal areas of calcification. Fibrolipomas are commonly found in the oral mucosa, although there are also reported cases of fibrolipoma in various other sites in the literature. [8] The etiology of fibrolipomas can be attributed to congenital factors, endocrine imbalances in the body or the maturation of lipoblastomatosis. The rate of growth of fibrolipomas is generally higher than the other variants of the lipomas. Even though fibrolipomas are benign tumours, few cases of transformation to liposarcoma have been reported in

AUTHORS' CONTRIBUTIONS

The participation of each author corresponds to the criteria of authorship and contributorship emphasized in the <u>Recommendations for the Conduct</u>, <u>Reporting</u>, <u>Editing</u>, and <u>Publication of Scholarly work in Medical</u> <u>Journals</u> of the <u>International Committee of Medical</u> <u>Journal Editors</u>. Indeed, all the authors have actively

REFERENCES

- Rydholm A, Berg NO. Size, site and clinical incidence of lipoma: factors in the differential diagnosis of lipoma and sarcoma. Acta Orthop Scand.1983;54: 929-934.
 DOI: 10.3109/17453678308992936
- [2] Adoga AA, Nimkur TL, Manasseh AN, Echejoh GO. Buccal soft tissue lipoma in an adult Nigerian: A case report and literature review. J Med Case Rep.2008; 2:382. DOI: 10.1186/1752-1947-2-382
- [3] Hakim E, Kolander Y, Meller Y, Moses M, Sagi A: Gigantic lipomas. Plast Reconstr Surg.1994: 369-371. DOI: <u>10.1097/00006534-199408000-00025</u>
- [4] Morris AD, Jane MJ, Ritchie D, Helliwell T. Diffuse intramuscular lipomatosis of a lower limb. Sarcoma.1998;2:53-6.
 DOI: <u>10.1080/13577149878172</u>
- [5] Bassett MD, Schuetze SM, Disteche C, et al. Deepseated, well differentiated lipomatous tumors of the chest wall and extremities. The role of cytogenetics

the literature. [9] Risk of malignant transformation to <u>Liposarcoma</u> is found in 1% of lipomas. Various risk factors for malignant transformation include large size (>5 cm), <u>calcification</u> in the swelling, invasion into surrounding structures and rapid growth rate. [10]

CONCLUSION

Though lipomas are the most common benign soft-tissue tumours, pedunculated fibrolipoma is a rare entity. Fibrolipomas are a variant of lipoma that are composed of mature adipocytes cells mixed with fibrous connective tissue. Pedunculated fibrolipomas are not life threatening generally but may occasionally ulcerate or cause other functional discomfort to the patient; surgical excision is the definitive management methods for such type of lesions. To prevent recurrence of the lesion, complete and adequate excision of the lesion is essential.

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COMPETING INTERESTS

The authors declare no competing interests.

in classification and prognostication. Cancer. 2005; 103:409-16. DOI: <u>10.1002/cncr.20779</u>

- [6] Zografos GC, Kouerinis I, Kalliopi P: Giant lipoma of the thigh in a patient with morbid obesity. Plast Reconstr Surg.2002;109: 1467-1468.
 DOI: 10.1097/00006534-200204010-00052
- [7] Shafer HL. Benign and malignant tumors of the oral cavity. In: Rajendran R, Sivapathasundharam B, eds. Textbook of Oral Pathology. 7th ed. 2012, 81. ISBN: 978-81-312-1946-1.
- [8] Xue EY, Schultz JJ, Datiashvili R. A Pedunculated Neoplasm of the Thigh. Eplasty. 2017;17:ic20.
- [9] Ozturk M, Ila K, Kara A, Iseri M. Fibrolipoma of the nasal septum; report of the first case. J Otolaryngol Head Neck Surg.2013; 42:11.
 DOI: <u>10.1186/1916-0216-42-11</u>
- [10] Milgram JW. Malignant transformation in bone lipomas. Skeletal Radiol.1990; 19 (5): 347–52. DOI: <u>10.1007/BF00193088</u>