

Uterine Lipoleiomyoma: A Case Report

Dnyaneshwar S. Jadhav¹, Balaji D. Baste^{2*}¹Associate Professor, Department of Pathology, SRTR Government Medical College & Hospital Ambajogai, Beed, Maharashtra, India²Assistant Professor, Department of Pathology, Seth G.S. Medical College and K.E.M. Hospital, Mumbai, Maharashtra India***Corresponding author**

Balaji D Baste

Article History

Received: 13.12.2017

Accepted: 17.12.2017

Published: 30.12.2017

DOI:

10.36347/sjmcr.2017.v05i12.011



Abstract: Uterine lipoleiomyoma is uncommon and rare entity. Although presumed to be benign, it has been inadequately studied. Its incidence is reported as 0.03–0.2%. Clinically the symptoms are indistinguishable from an ordinary leiomyoma. Lipoleiomyoma consists of variable proportion of mature adipocytes and smooth muscle cells. A 49 year old post-menopausal female presented with complaints of abnormal uterine bleeding and pain in abdomen since two months. On USG multiple fibroids were detected and Patient was diagnosed with fibroid uterus and was operated upon. Gross examination of the hysterectomy specimen revealed multiple subserosal leiomyomas. On histopathology, diagnosis of uterine lipoleiomyoma was given. It is not so common tumor and so it should be kept as differential diagnosis in the pelvic region.

Keywords: Lipoleiomyoma, uterus, Hysterectomy.

INTRODUCTION

Uterine lipoleiomyoma is a rare and usually an incidental benign fatty tumor, which is considered to be a variant of uterine leiomyoma. This tumor is similar to myolipoma of the soft tissue and is composed of benign smooth muscle and mature adipose tissue [1]. Leiomyomas occur in the reproductive age group whereas lipoleiomyomas occur in the premenopausal and postmenopausal period [2]. The reported incidence varies from 0.03% to 0.2% of leiomyomas. The clinical features and optimal treatment of this neoplasm remain unclear because of its rarity [3].

CASE REPORT

A 49 year old post-menopausal female presented with complaints of abnormal uterine bleeding and pain in abdomen since two months. On per vaginum examination the uterus was bulky. On USG examination multiple fibroids were detected along with a large 5x5x4 cms fibroid. Patient was diagnosed with fibroid uterus and was operated upon. On gross examination [Figure 1], the uterus was enlarged and its external surface showed multiple subserosal

leiomyomas. The largest was of 5cm in diameter and the smallest measured 2 cm in diameter. Cut sections of the mass showed a tumor which was firm and grey yellow in colour. No necrosis or hemorrhage was identified. Microscopically [Figure 2(A) 2(B), Figure 3], intersecting fascicles of benign looking smooth muscle cells admixed with mature adipose tissue were seen. No nuclear atypia or mitoses was seen. And a diagnosis of lipoleiomyoma was made. Sections from other tumor areas showed features of leiomyoma.



Fig-1: Cut surface of the uterus showing a well circumscribed lipoma yellowish in colour

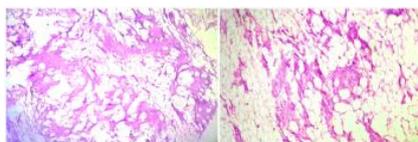


Fig-2:(A).2(B) (10X) interlacing bundles of smooth muscle cells with interspersed mature adipocytes

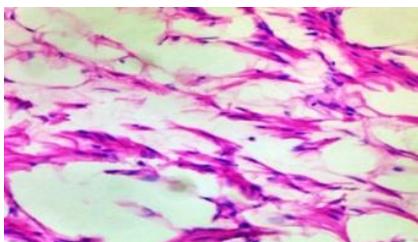


Fig-3 :(40x) Smooth muscle cells with interspersed mature adipocytes

DISCUSSION

Lobstein, in 1816, first described lipoleiomyomas, but later on Willen and Pounder designated these tumors as “uterine fatty tumors” and subdivided them into “lipoma” and “mixed lipomas/leiomyomas” (lipoleiomyomas)[4]. By contrast with ordinary leiomyomas which tend to occur predominantly in women of reproductive age and regress after menopause, the lipoleiomyomas are frequently seen in older women. Actually, mean age of the patients in the largest two series so far was 55.4 years and almost 60% of patients were aged older than 50[5].

The most common signs and symptoms are similar to typical uterine leiomyomas (menstrual disturbances, abdominal and/or pelvic pain, a palpable mass, urinary frequency, incontinence and a sensation of pressure). Its commonest location is in the uterine corpus however, the cervix, broad ligament, retroperitoneum and ovary can also be involved. It can be intramural, subserosal or submucosal [4].

Finding an admixture of mature adipocytes and smooth muscle cells on microscopy is required to designate a neoplasm as lipoleiomyoma. The adipocytes may be evenly distributed throughout the tumor or may be concentrated in only focal area. Also, adipocyte component in lipoleiomyoma may differ widely and a certain level of adipocytes may not be defined to achieve the diagnosis of lipoleiomyoma. These tumors may contain microscopic foci of adipocytes resembling regular leiomyomas in gross appearance, or high amounts of adipocytes may be detected resulting in yellow and lobulated cut surface [6].

The different proposed theories which are summarized by Sieinksi are as follows: (1) Misplaced embryonal mesodermal rests with a potential for lipoblastic differentiation. (2) Lipoblast or pluripotential cells migrating along uterine arteries and nerves. (3) Adipose metaplasia of stromal or smooth muscle cells in leiomyoma. While other theories suggest possible role of Lipocytic differentiation of a specific primitive

tissue cell, perivascular fat cells accompanying the blood vessels in to uterine wall during surgery or fatty infiltration or degeneration of connective tissue[7].

Lin *et al.* demonstrated that lipoleiomyoma may associate with concomitant metabolic disorders including hyperlipidemia, hypothyroidism, and diabetes mellitus [8]. During imaging, the presence of fat with in a uterine mass is diagnostic of lipoleiomyoma as well as pure lipoma. The diagnosis can be made by MRI or CT which can specifically depict fat content within the tumor [3].

Differential diagnosis for lipoleiomyoma include spindle cell lipoma, angiolipoma, angiomyolipoma, atypical lipoma, myelolipoma, myxoid mesenchymal tumors, pelvic fibromatosis, well-differentiated liposarcoma, carcinosarcoma with heterologous liposarcomatous differentiation, benign cystic ovarian teratoma and other ovarian fatty tumors (lipomas), and benign or malignant degeneration of ordinary leiomyomas[4].

CONCLUSION

These tumors should be differentiated from fatty ovarian tumors, leiomyoma with degenerative changes, and uterine sarcomas. Usually, lipoleiomyoma presents with symptoms similar to those caused by conventional leiomyoma and there are no specific clinical presentations. Imaging can be helpful in the preoperative diagnosis and localization of the lipoleiomyoma but histopathological examination is must for confirmation of diagnosis.

REFERENCES

1. Manjunatha HK, Ramaswamy AS, Kumar BS, Kumar SP, Krishna L. Lipoleiomyoma of uterus in a postmenopausal woman. J Midlife Health.2010; 1(2):86-8.
2. Manimaran D, Khan DM, Yasmin S, Anuradha S. Lipoleiomyoma: A rare variant of uterine leiomyoma. International Journal of Health & Allied Sciences .Dec 2014, 3(4):255-258.

3. Sen R, Gupta S, Semwal S, Batra A, Chaudhary M. Submucosal lipoleiomyoma in a 50 year old : a rare entity. *International J. of Healthcare and Biomedical Research*. July 2014;2(4): 77-79
4. Sharma S, Mandal AK. Uterine Lipoleiomyoma: A Five Year Clinico pathological Study. *AWCH*.2016; 2(2): 22-26
5. Devarmani SS, Laheru VB. Uterine lipoleiomyoma- a rare case report with review of literature. *Journal of Evolution of Medical and Dental Sciences*. January 28,2013; 2(4) :352-355
6. Narchal S, Patil SB, Purohit PV, More SS. Lipoleiomyoma of uterus: A case report with review of literature. *International Journal of Health & Allied Sciences*. Jul-Sep 2013; 2(3):209-211
7. Panjvani SI, Sarvaiya AN, Gandhi M, Chaudhari BS. A huge lipoleiomyoma of uterus: A Case Report and Review of Literature. *IJBR* .2013; 4 (2):127-130
8. Obeidat F, Fares FA, Najjar S, Qaisi NA. Uterine Lipoleiomyoma. *J Med J* 2014; 48 (3):202- 206