

RESEARCH ARTICLE

PATHOLOGY

**UTERINE LIPOLEIOMYOMA– AN INTERESTING ENTITY/RESEARCH ARTICLE**

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**ABSTRACT**

Lipoleiomyomas are unusual benign neoplasms of uterus and are considered to be a variant of uterine myomas. Their reported incidence varies from 0.03 to 0.2%. When a large uterine tumor is found in perimenopausal or postmenopausal woman, the possibility of malignancy should be considered.. These tumors generally occur in asymptomatic obese perimenopausal or menopausal women. We here in report an incidentally diagnosed extremely unusual case of uterine lipoleiomyoma.

## KEY WORDS

Uterine Lipoleiomyoma , neoplasms ,malignancy.

## INTRODUCTION

Lipomatous uterine tumors are unusual benign neoplasms. <sup>(1),(2)</sup> Histologically, these tumors comprise a spectrum including pure lipomas, lipoleiomyomas and fibrolipomyomas. Lipoleiomyoma is a very rare lesion of the uterus occurring primarily in obese premenopausal and post menopausal patients. The tumor consists of long intersecting bundles of bland, smooth muscle cells admixed with nests of mature fat cells and fibrous tissue. <sup>(2),(3),(4)</sup> We report a case of lipoleiomyoma of uterus.

## MATERIAL METHODS

(Case Report). A 40-year-old premenopausal woman presented with irregular menses since one year. The patient's history revealed that she had attained menarche at the age of 14 years. Previous cycles were regular of 4-5 days duration and moderate intensity at 28 days interval. Gynecological examination revealed no abnormalities of the vulva, cylindrical vaginal

portion of the cervix and no evident pathological change was detectable with clinical examination. Findings of ultrasonography examination suggested bulky uterus with thickened endometrium of 6 mm and hyperechoic mass suggestive of myoma of posterior wall of uterus, measuring 5 cm in diameter. Both the ovaries and tubes were normal in appearance.

All hematological parameters were within normal range. The patient underwent total abdominal hysterectomy with bilateral salpingo-oophorectomy

On gross examination of the specimen, the uterus measured 9.5 × 6.5 × 6 cm. It showed an intramural and well-circumscribed nodule measuring 5 cm in diameter which differed from a typical appearance of uterine leiomyoma by being pale yellow and having a somewhat softer consistency on its cut surface [Figure 1]. The serosal surfaces of the uterus were normal. External and cut section of both the ovaries and the fallopian tubes appeared grossly normal.

**Figure - 1**

***Sectioned surface of uterine lipoleiomyoma showing distinct pale yellow appearance***

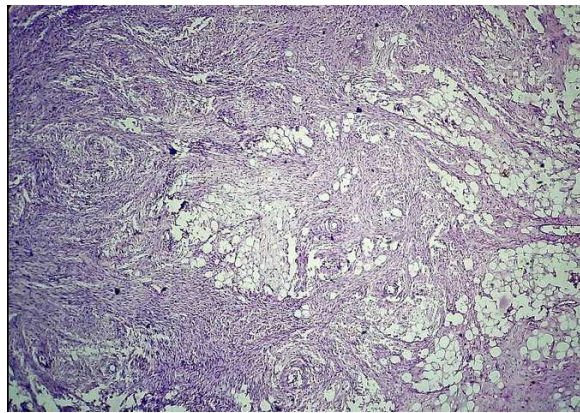


Histological examination of the nodule showed a mixture of bland, spindle-shaped smooth muscle cells without nuclear atypia in a whorled pattern with admixed mature adipocytes. The nuclei of the smooth muscles were elongated and had finely dispersed chromatin and small nucleoli. Between these muscle cells, a significant amount of fat cells

were visible. The adipose component was entirely mature without any lipoblasts [Figure 2],[Figure 3]. Based on the above findings, the tumor was diagnosed as a benign lipoleiomyoma. The endometrium showed changes of simple hyperplasia without atypia. Sections from both the ovaries and tubes being unremarkable.

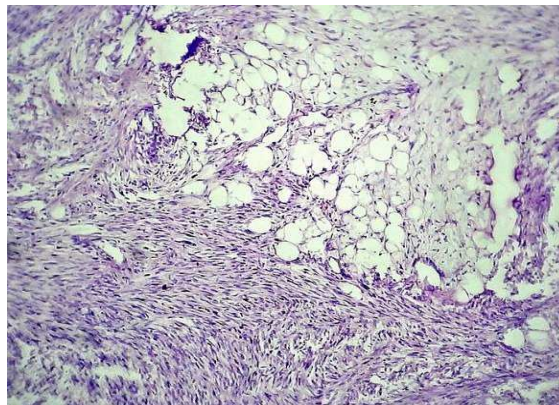
**Figure 2**

***Well-circumscribed proliferation of bland, spindle-shaped smooth muscle cells without nuclear atypia in a whorled pattern with admixed mature adipocytes (H and E, ×10)***



**Figure 3**

***Smooth muscle cell proliferation admixed with mature adipocytes (H and E, ×40)***



## **DISCUSSION**

Lipoleiomyoma of the uterus is a rare tumor found in menopausal women. The sign and symptoms are similar to those caused by leiomyomas of the same size, such as a palpable mass, hypermenorrhea, and pelvic

pain. Most patients are asymptomatic. They usually occur in corpus, predominantly intramurally, however they may be subserosal.<sup>(5,6)</sup> In our case, the location of lipoleiomyoma was fundal. A case of ovarian

lipoleiomyoma has also been reported.<sup>(7)</sup> The histological spectrum includes lipoma, and fibromylipoma,<sup>(8)</sup> so lipoleiomyoma are composed histologically of variable amounts of smooth muscle, fat cells and fibrous tissue.

Fatty metamorphosis of smooth muscle cells of leiomyomas is the most likely cause for the development of tissue rather than fatty degeneration. The differential diagnosis of the lipomatous mass in the pelvis includes benign cystic teratoma, malignant degeneration of cystic teratoma, nonteratomatous lipomatous ovarian tumor, benign pelvic lipoma, liposarcoma<sup>(7,8)</sup> and lipoblastic lymphadenopathy. Association of lipomatous uterine tumors and endometrial carcinomas with lipoleiomyosarcomas arising in uterine lipoleiomyomas have been reported.

Lipoleiomyoma if asymptomatic requires no treatment and is clinically similar to a leiomyoma; so it is important to differentiate these tumors from ovarian teratoma, which require surgical excision<sup>(9)</sup>.

Imaging plays an important role in determining the intrauterine location and fatty nature of lipoleiomyomas. Imaging is used to differentiate uterine lipoleiomyomas from cystic ovarian teratomas because teratomas are usually surgically excised, whereas lipoleiomyomas require no therapy<sup>(8)</sup>.

Though imaging plays an important role in preoperative diagnosis and exact intrauterine location of a lipoleiomyoma, it is the pathological examination that confirms the diagnosis. This case is being reported because of its rarity.

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