

CASE REPORT

LIPOLEIOMYOMA OF UTERUS: A CASE REPORT

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ABSTRACT: INTRODUCTION: Fatty tumours of the uterus are exceedingly rare. Lipoleiomyoma of the uterus is a rare benign uterine tumour thought to be a variation of leiomyoma. The presence of fatty tissue in the myometrium is anomalous, interpreted as lipomatous degeneration, smooth muscle metaplasia or as a benign tumour called as lipoleiomyoma. The incidence is variously reported as 0.03–0.2%. Case Report- here we present a case of 58 years old postmenopausal woman with submucosal fibroid. Discussion- we confirmed our diagnosis of lipoleiomyoma by gross and microscopic findings.

KEYWORDS: Lipoleiomyoma, Postmenopausal, Uterus.

INTRODUCTION: Uterine leiomyomas are extremely common neoplasms with a quoted incidence of 4–11% and mainly seen (40%) in women over 50 years.^[1] Many variants which are the result of secondary changes have been described and are detectable in around 65% of cases. Lipoleiomyoma is an alteration that was previously called as fatty metamorphosis, lipomatous degeneration, adipose metaplasia, etc. It is now regarded as a distinct true neoplasm. In spite of relatively common occurrence of leiomyomas of uterus, lipoleiomyomas are rare variants of uterine leiomyoma. The incidence is variously reported as 0.03–0.2%.^[2,3]

CASE REPORT: A 58 years old postmenopausal woman presented with complaints of pain in the lower abdomen and bleeding per vaginum on and off. The patient's history revealed that she had attained menarche at the age of 14 years, had regular menstrual cycles of 4–5 days duration at 28 days interval. She had attained her menopause 5 years back. Gynaecological examination revealed unhealthy cervix. Per abdomen findings showed tender and bulky uterus. Ultrasound showed a solitary hyperechoic mass in the myometrium of the uterus measuring 3.5×3cm. Abdominal hysterectomy was done for the same.

On gross examination of the specimen uterus and cervix together measured 9×5×3cm. On cut section there was a sub mucosal fibroid measuring 3x3 cm shifting the endometrial cavity to one side. Cut section of the fibroid was solid grayish white with a whorled appearance. The periphery of the fibroid was pale yellow and softer in consistency as compared to the rest of the fibroid. Paraffin embedded sections were prepared stained with hematoxylin and eosin. Microscopically, sections from the fibroid showed a well encapsulated mass of proliferating benign spindle shaped smooth muscle cells without any atypia and forming a whorled appearance admixed with mature adipocytes. The adipocytes were completely benign looking with no lipoblasts. Endometrium showed mild hyperplasia of the glands. Cervix showed chronic cervicitis.

DISCUSSION: Lipomatous uterine tumors can generally be subdivided into two types: pure or mixed lipomas.^[4,5] The latter consist of lipoleiomyoma, angiomyolipoma, fibrolipoma. A third group of

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malignant neoplasm has been proposed, which is liposarcoma; however, this is very rare.^[3] Mixed lipoma contains variable amounts of fat, fibrous tissue and smooth muscle while pure lipoma is composed of encapsulated adipose tissue with thin septa of fibrous tissue only.^[4] Most of the reported cases are of mixed type and lipoleiomyoma is the most common.^[3] Pure lipoma of the uterus is extremely rare, with only a handful of cases reported.^[5] Malignant degeneration in uterine lipoleiomyoma is extremely rare, although it has been reported in the literature.^[6]

Lipoleiomyoma is a benign soft tissue tumour which was first described in 1991 by Meis and Enzinger. They usually occur within the abdominal cavity and retroperitoneum, although it may also be found in the subcutis and muscular fascia.^[7] These tumours are seen in uterus as intramural growths but rarely may be seen arising in cervix, subserosal and from parametrium in broad ligament.^[2,8]

Lipoleiomyoma of the uterus occurs primarily in obese perimenopausal and post-menopausal patients. Most patients are asymptomatic. Some may show signs and symptoms are similar to those caused by leiomyomas of the same size, such as a palpable mass, hypermenorrhea, and pelvic pain.^[9] The origin of lipomatous lesion of uterus has been subject of much speculation. In the past, they were reported as hamartomas or more appropriately, choristomas.^[10] Now, many theories have been proposed, including misplaced embryonic fat cells, direct metaplasia of smooth muscle or connective tissue into fat cells and proliferation of accompanying perivascular fat cell into blood vessel, inclusion of fat cells into the uterine wall during surgery, or fatty infiltration or degeneration of connective tissue.^[6] A number of various lipid metabolic disorders or other associated conditions, which are associated with estrogen deficiency as occurs in peri or post-menopausal period, possibly promote abnormal intracellular storage of lipids.^[11]

There are a number of differential diagnoses for a fat-containing tumor in the female pelvis, such as benign cystic ovarian teratoma, malignant degeneration of a benign cystic ovarian teratoma, non-teratomatous lipomatous ovarian tumor, benign pelvic lipoma, liposarcoma, extra-adrenal myelolipoma in pelvis, lipoblastic lymphadenopathy and retroperitoneal cystic hamartoma. Among the long list of differentials, the most common one is benign cystic ovarian teratoma, which usually requires surgical excision. On the other hand, asymptomatic uterine lipoleiomyoma can be managed conservatively because of its benign nature.^[12]

Though imaging plays an important role in preoperative diagnosis and localization of the lipoleiomyoma, it is the final pathological examination that confirms the diagnosis.

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Figure 1- On gross examination, a grayish white to grayish yellow sub mucosal fibroid measuring 3x3 cm shifting the endometrial cavity to one side.

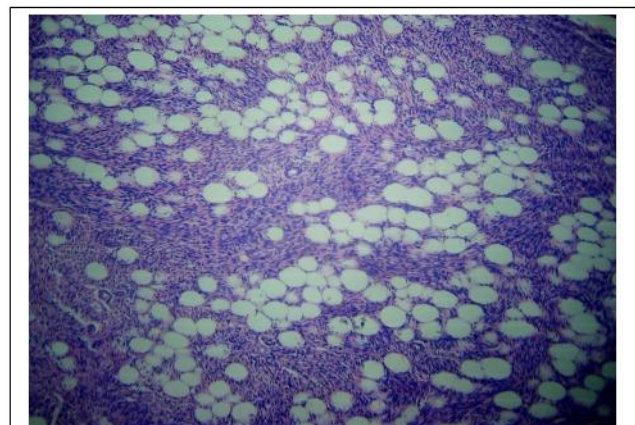


Figure 2- Low power view showing mass of proliferating benign spindle shaped smooth muscle cells and forming a whorled appearance admixed with mature adipocytes.

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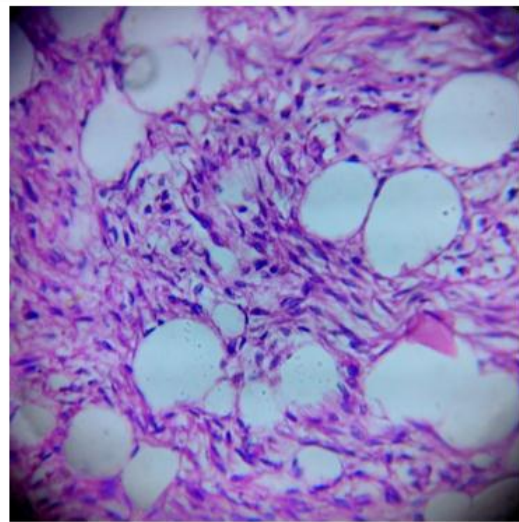


Figure 3- High power view showing bundles of smooth muscles admixed with mature adipocytes.

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