Case Report

Giant lipoleiomyoma of uterus mimicking ovarian dermoid cyst: a rare case report

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Abstract

Lipomatous tumors of uterine origin are unusual benign neoplasms. The histological spectrum includes lipoleiomyoma, fibrolipomyoma, angiomyolipoma, pure lipomas and leiomyoliposarcoma depending open various compositions of mesodermal tissue. The tumor consists of long intersecting bundles of bland, smooth muscle cells admixed with nests of mature fat cells and fibrous tissue. They are typically found in postmenopausal women and are associated with ordinary leiomyomas. However, giant lipoleiomyomas more than 20 cm are rare and cause diagnostic dilemma on imaging studies as they need to be differentiated with ovarian dermoid cyst. We report this unusual case of uterine lipoleiomyoma because of its rarity and giant size.
Introduction
Lipoleiomyomas are rare benign neoplasms of uterus with reported incidence of 0.03 to 0.2%.\cite{1,2} These tumors are considered to be a variant of uterine myomas, composed of variable proportion of mature lipocytes and smooth muscle cells.\cite{3,4,5} The signs and symptoms are similar to those caused by leiomyomas of the same size, such as a palpable mass, hypermenorrhea, and pelvic pain. A lipomatous pelvic mass of uterine origin may be endophytic or exophytic. When the mass is exophytic, the diagnosis is more difficult, because radiologically its appearance simulates the more common ovarian tumors. We report a case of giant lipoleiomyoma that arose in the uterus and was preoperatively misdiagnosed as large dermoid cyst ovary.

Case Report
A 66-year-old postmenopausal diabetic woman presented with lower abdominal pain and distension since 10 days. Clinical examination revealed large palpable mass in lower abdomen. Ultrasonography was done which suggested a large bulky abdomino-pelvic mass. CECT whole abdomen was reported as large left ovarian dermoid cyst causing bilateral mild hydronephrosis displacing surrounding bowel loops.

All the standard serological and hematological investigations and metastatic workup was done and the parameters were within normal range. The patient underwent total abdominal hysterectomy with bilateral salpingo-oophorectomy. Per-operative examination revealed large uterine mass approximately 25 cm in diameter with unremarkable cervix and bilateral adnexa. There was absence of free fluid or abdomino-pelvic deposits.

On gross examination of the specimen, well circumscribed yellow-white, soft to firm, solid tumor measuring 23x19x17 cm, distorting the endometrial cavity. Few grey white whorled areas were also noted [Figure 1]. Serosal surfaces of the uterus along with bilateral adnexae appeared grossly unremarkable. Histological examination of tumor showed a well circumscribed tumor composed of bland, spindle-shaped smooth muscle cells arranged as fascicles admixed with interspersed mature adipose tissue. The nuclei of the smooth muscles were elongated without nuclear atypia and had finely dispersed chromatin. Extensive sampling showed no lipoblasts or any evidence of atypia, coagulative tumor necrosis, increased cellularity or atypical mitosis [Figures 2]. Based on the above findings, a diagnosis of lipoleiomyoma was made. Both the adnexae were unremarkable histologically.

Discussion
Uterine lipoleiomyoma is an unusual benign tumor and was first described in 1991 by Meis and Enzinger. Malignant degeneration is extremely rare and so far only one case of leiomyoliposarcoma has been reported.\cite{6} Lipoleiomyomas occurs predominantly among postmenopausal women aged between 50 and 80 years, with an incidence that ranges from 0.03% to 0.20% of all leiomyomas. This tumor is a variation of leiomyoma and consists of smooth muscle cells, mature adipose tissue and fibrous tissue with well circumscribed margins. The histogenesis of lipomatous tumors of the uterus is controversial and many theo-
Giant lipoleiomyoma of uterus

Uterine lipoleiomyoma is an uncommon finding generally diagnosed postoperatively during histopathological examination. Malignant transformation is rare, although few case reports are described in literature. We present this case of uterine lipoleiomyoma because of its giant size, which is rare, causing clinical and radiological diagnostic dilemma preoperatively in the present case.

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Competing Interests
None declared.

References

This case is presented here as giant lipoleiomyomas are rare lesions and one should be aware of this entity to avoid diagnostic dilemma caused preoperatively by its fat component while differentiating with more common ovarian neoplasm. This also prevents undue apprehension and more radical procedures as done in our case.

Conclusion
Uterine lipoleiomyoma is an uncommon finding generally diagnosed postoperatively during histopathological examination. Malignant transformation is rare, although few case reports are described in literature. We present this case of uterine lipoleiomyoma because of its giant size, which is rare, causing clinical and radiological diagnostic dilemma preoperatively in the present case.