

Uterine lipoma with a coincidental Brenner's tumor in the ovary in postmenopausal women: A case report

Yasmeen Khatib, Richa D. Patel, Madhura Dande

Department of Pathology, Rustom Narsee Cooper Municipal Corporation Hospital, Mumbai, Maharashtra, India

ABSTRACT

Pure uterine lipoma is a rare entity with only a few cases having been reported in the literature. They usually develop in postmenopausal woman and are mistaken for leiomyomas both clinically and on ultrasound examination. Magnetic resonance imaging (MRI) is the best modality for its preoperative diagnosis. Uterine lipoma has been reported in association with other lesions like endometrial carcinoma, cervical carcinoma and struma ovarii. We present a case of pure lipoma of the uterus with a coincidental benign Brenner's tumor of the ovary in a 60-year-old female. Patient presented with pain in the abdomen and a preoperative diagnosis of leiomyoma was made based on ultrasonography findings. Gross examination revealed a fatty tumor with a nodule in the right ovary. Microscopy confirmed the presence of pure uterine lipoma with a co-existent Brenner's tumor of the ovary. To the best of our knowledge this is the first case of uterine lipoma to be reported in association with ovarian Brenner's tumor.

Key Words: CD34, Brenner's tumor, lipoma, ovary, uterine tumor

INTRODUCTION

The incidence of lipomatous tumors of the uterus varies from 0.03 to 0.2%.^[1] More commonly encountered ones are lipoleiomyomas which contain both smooth muscle as well as fat cells. Pure uterine lipomas are very rare most being a chance finding with a hysterectomy done for leiomyoma.^[2] A diagnosis of this entity can only be made when the tumor is composed of pure adipose tissue and smooth muscle, if any has to be confined only to the periphery of the tumor.^[3] The histogenesis of this tumor is still an enigma.^[4] Preoperative diagnosis should be confirmed by microscopy as these tumors can mimic a variety of other uterine neoplasms including malignancy.^[5]

Address for Correspondence: Dr. Richa D. Patel,
Department of Pathology, R. N. Cooper Hospital,
Mumbai - 400 056, Maharashtra, India.
E-mail: dr.richa.13@gmail.com

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CASE REPORT

A 60-year-old post menopausal woman presented with the chief complaint of lower abdominal pain since 2 months. There was no significant past history. Gynecological examination revealed a large uterus of 8 weeks size. The right and left adnexae and cervix were unremarkable. Ultrasonography (USG) was suggestive of leiomyoma with fatty degeneration. Abdominal hysterectomy with bilateral salpingo-oophorectomy was done. On gross examination the uterus measured 11 × 7 × 7 cms. External surface of the body of the uterus appeared bulky. Cut section showed an submucosal, well-circumscribed, homogenous, yellow, greasy tumor measuring 6 × 6.5 cms completely obliterating the uterine cavity with a thin rim of myometrium at the periphery. Left ovary measured 4 × 3 cms and showed a solid white nodule measuring 1.8 × 0.8 cms [Figure 1]. The right ovary

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and both the tubes were unremarkable. Microscopic examination revealed a benign tumor composed of mature adipocytes separated by thin fibrous septae [Figure 2]. The endometrium was atrophic. Left ovarian nodule showed features of a benign brenners tumor which showed absence of atypia or invasion [Figure 3]. Based on the histopathological findings a diagnosis of pure uterine lipoma with an benign ovarian brenners tumor was given. Patient is doing well 6 months after surgery.

DISCUSSION

Lipomatous uterine tumors are uncommon benign neoplasms which are usually diagnosed by histopathological examination. They encompass a spectrum of tumors that include a pure lipoma, lipoleiomyoma and lipofibroma based on the relative proportion of fat smooth muscle and fibrous tissue present in the tumor.^[5] Out of these tumors pure lipomas are rare with few cases reported in the literature. Some of these are coincidentally associated with other lesions [Table 1]. Dey and Dhar reported a case of uterine lipoma in association with struma ovarii in 1993.^[6] Di Gesu'G *et al.*, reported a case of uterine lipoma with endometrial carcinoma in 1998.^[7] While Dilek Tu found a case of uterine lipoma with cervical carcinoma.^[8] To the best of our knowledge no case of pure uterine lipoma in association with brenners tumor has been reported in the literature till date as was seen in the present case. Uterine lipoma is usually seen in post menopausal woman between 50-70 years of age. Most patients are asymptomatic. Some patients present with abdominal mass, pelvic discomfort, abdominal pain, uterine bleeding, urinary frequency etc. The most common location is in the uterine corpus but they can also be found anywhere in the uterus or cervix. Most are intramural but some may be submucosal or subserosal in location.^[9] Average size of this tumor varies between 5-10 cms and most tumors are solitary. The present case was a single 6 cms sized mass in the body of the uterus as has been reported in the earlier case reports. Preoperative diagnosis on USG is usually missed and it is mistaken for the more common leiomyoma as was in the present case. It presents as a hyperechoic avascular mass on USG with a hypoechoic rim but findings are not specific. Computed



Figure 1: Gross photograph showing well circumscribed, homogenous, yellow, greasy tumor obliterating the uterine cavity with a solid white nodule in the left ovary

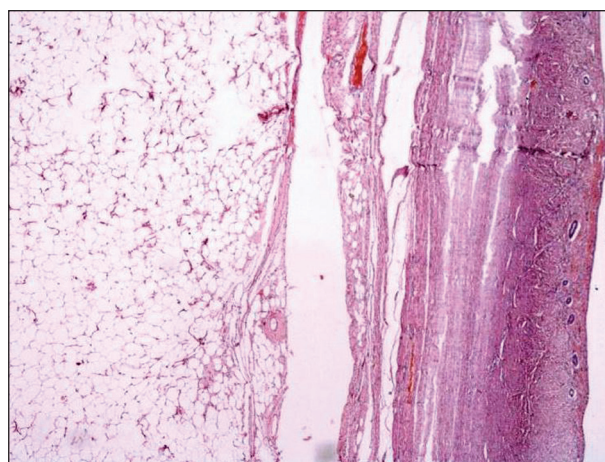


Figure 2: Microphotograph showing a benign tumour composed of mature adipocytes separated by thin fibrous septae with atrophic endometrium (H and E, 40 x)

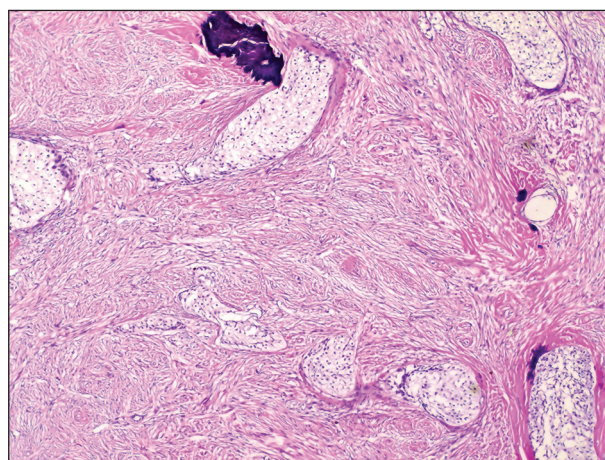


Figure 3: Microphotograph showing nests of transitional cells surrounded by fibromatous stroma and few areas of calcification (H and E, 100 x)

Table 1: Uterine lipoma with associated lesions

Authors	Age	Associated lesions	Uterine lesions
R. Vilallonga <i>et al.</i>	48 years	Endometrial polyps, ovarian thecoma	Uterine lipoma
Dilek TU <i>et al.</i>	55 years	Carcinoma cervix	Uterine lipoma
G Di Gesu <i>et al.</i>	71 years	Endometrial carcinoma	Uterine lipoma
Dey and Dhar	—	Struma ovarii	Uterine lipoma
Khatib <i>et al.</i> (present case)	60 years	Benign Brenners tumor	Uterine lipoma

Tomography (CT) findings are more specific but MRI is the best modality for its diagnosis. On MRI the fatty component is high in signal intensity on both T1 and T2 weighted images.^[10] Final diagnosis is made on microscopy which shows the tumor to be composed of mature adipose tissue separated by fibrous septae. Smooth muscle if any is confined to the periphery of the tumor. The histogenesis of this tumor is still unclear as fat tissue is not normally found in the uterus. Various theories for its histogenesis have been proposed. Some of these include misplaced embryonic fat cells, metaplasia of the connective tissue or the muscle cells into adipocytes, lipocytic differentiation of specific primitive connective tissue cells, proliferation of perivascular fat cells, fatty infiltration or degeneration of the connective tissue. In asymptomatic cases no treatment is required while in others, treatment is similar to leiomyomas which is hysterectomy.

CONCLUSION

To conclude uterine lipomas can be considered in the differential diagnosis of cases of benign uterine neoplasms especially in postmenopausal woman. MRI can give a specific preoperative diagnosis obviating the need for surgery. Coexistent occurrence of pure lipoma of the uterus and Brenner's tumor of the ovary has not been documented in literature and we present the first such case.

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Conflict of interest

There are no conflicts of interest.

REFERENCES

1. Bandopadhyay A, Ray S, Bera P, Gangopadhyay M, Chakrabarti I, Dey B. Calcified pure uterine lipoma mimicking myoma. *J Turk Ger Gynecol Assoc* 2010;11:113-4.
2. Fernandes H, Naik CN, Swethadri GK, Bangera I, Miranda D. Pure lipoma of the uterus: A rare case report. *Indian J Pathol Microbiol* 2007;50:800-1.
3. Pounder DJ. Fatty tumours of the uterus. *J Clin Pathol* 1982;35:1380-3.
4. Garg A, Sudhamani S, Kiri VM, Pandit AA. Pure lipoma of uterus: A case report with review of literature. *J Sci Soc* 2013;40:114-5.
5. Vamseedhar A, Shivalingappa DB, Suresh DR, Geetha RL. Primary pure uterine lipoma: A rare case report with review of literature. *Indian J Cancer* 2011;48:385-7.
6. Dey P, Dhar KK. Lipomatous tumors of uterus. *J Indian Med Assoc* 1993;91:99.
7. Di Gesu'G, Cormio G, Di Vagno G, Melilli GA, Renzli G, Selvaggi L. Pure lipoma of the uterus in association with endometrial carcinoma. *Eur J Obstet Gynecol Reprod Biol* 1998;80:199-200.
8. Dilek TU, Akcin U, Erdem O, Tiras B, Dursun A. Uterine lipoma and coincidental cervical cancer: A case report. *Int J Gynecol Cancer* 2006;16:445-7.
9. Jacobs JE, Markowitz SK. CT diagnosis of uterine lipoma. *AJR Am J Roentgenol* 1988;150:1335-6.
10. Lau LU, Thoeni RF. Case report. Uterine lipoma: Advantage of MRI over ultrasound. *Br J Radiol* 2005;78:72-4.