

Fibroid after Hysterectomy: A Diagnostic Dilemma

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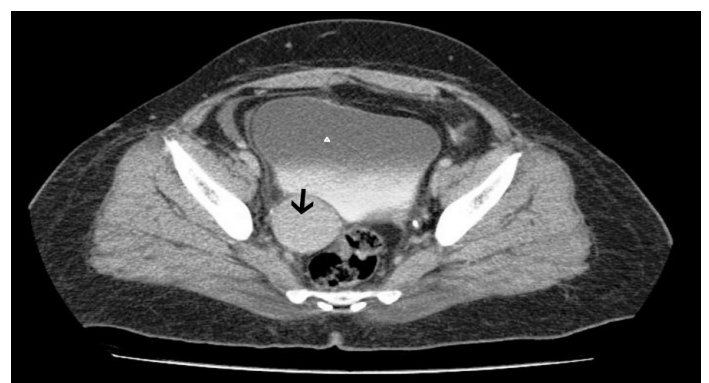
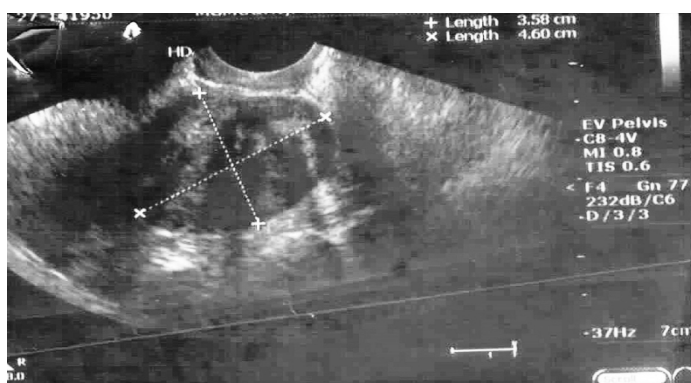
ABSTRACT

Broad ligament fibroids are rare and often pose clinical diagnostic difficulties. We report a case of broad ligament fibroid in a woman after hysterectomy. The lady presented to us with continuous lower abdominal pain of seven months duration. Bimanual examination revealed a firm mass on the right side of the vaginal vault. Transvaginal sonogram and computed tomography scan was suggestive of possible parasitic leiomyoma or a broad ligament fibroid. Exploratory laparotomy and removal of the mass, followed by histological examination confirmed leiomyoma. Extra-uterine fibroid should be considered in the differential diagnosis of pelvic masses even in the post-hysterectomy state.

Keywords: Broad ligament fibroid, Extra-uterine leiomyoma, Post-hysterectomy

CASE REPORT

A 48-year-old woman, para 1, living 1, presented to our outpatient department with continuous lower abdominal pain of seven months duration. She had undergone total abdominal hysterectomy six years back for multiple fibroids in the uterus. Speculum examination showed a healthy looking vagina. Bimanual examination revealed a firm mass measuring 4 x 4 cm on the right side of the vaginal vault. Transvaginal sonogram revealed a solid, hypoechoic, well-circumscribed right adnexal mass of size 3.5 x 4.6 cm, and both ovaries could not be imaged separately [Table/Fig-1]. Computed tomography (CT) scan was done which showed post hysterectomy status with bilateral thin walled cystic lesions possibly ovarian cysts, right side measuring 4.6 x 5.3 x 5 cm and left side 1.8 x 2.5 x 2.3 cm [Table/Fig-2]. On the right side adjacent to the vaginal stump, a well-defined lesion isodense to the muscle (40 HU) was seen measuring 4.6 x 4 x 4.7 cm, with intense contrast enhancement (137 HU). Fat plane between the lesion and bladder, rectum, vagina and pelvic wall was maintained. There was no evidence of calcification or necrosis within the lesion and no retroperitoneal lymphadenopathy. The impression was that of possible parasitic leiomyoma or a broad ligament fibroid. Cancer antigen (CA-125) was reported normal with a value of 7.2 U/ml.



[Table/Fig-1]: Transvaginal sonogram showing solid, hypoechoic, well-circumscribed right adnexal mass of size 3.5 x 4.6 cm **[Table/Fig-2]:** Axial contrast-enhanced computed tomographic scan section at the level of urinary bladder (white arrowhead) showing post-hysterectomy status, with intensely enhancing well-defined lesion (black arrow) on the right side with fat plane between the lesion and surrounding structures maintained

ligament fibroid can be difficult to differentiate from ovarian tumours [4]. Bansal et al., reported a case of a massive broad ligament fibroid which mimicked an ovarian tumour because of its myxoid and cystic degenerations [5]. Our patient had hysterectomy several years back and the ovaries could not be imaged during transvaginal ultrasound examination leading to a doubt regarding origin of the pelvic mass. Though CA-125, done to differentiate from ovarian malignancy was normal, broad ligament fibroid can also cause pseudo-Meig's syndrome with elevated CA-125 and mimic ovarian malignancies. Similar diagnostic dilemma has been reported by Gadre in a case of a broad ligament fibroid in an elderly postmenopausal lady [6]. As our patient was status post-hysterectomy with adnexal mass, our initial diagnosis was ovarian tumor, which subsequently was converted into a more benign diagnosis of broad ligament fibroid using higher imaging modalities like CT scan, and a simple removal of the fibroid sufficed. Diagnosis of extrauterine leiomyoma is by histo-pathological examination using standard histology and immuno-histochemistry using anti-desmin and anti-smooth muscle-actin antibodies.

The clinical symptoms and imaging features of extra-uterine fibroids depend on the location of the lesion and on its growth pattern. The differential diagnosis of an extra-uterine fibroid should be considered in cases of pelvic masses even in the post-hysterectomy state.

REFERENCES

- [1] Fasih N, Shanbhogue AKP, Macdonald DB, Fraser-Hill MA, Papadatos D, Kielar AZ, et al. Leiomyomas beyond the uterus: unusual locations, rare manifestations. *Radiographics*. 2008;28:1931-48.
- [2] Monaghan JM, Lopes T, Naik R. Total hysterectomy for cervical and broad ligament fibroids. In: Monaghan JM, Lopes T, Naik R, 10th edn. *Bonney's Gynaecological Surgery. MA: Blackwell Publishing*. 2004: 74-86.
- [3] Sinha R, Sundaram M, Mahajan C, Sambhus A. Multiple leiomyomas after laparoscopic hysterectomy: report of two cases. *J Minim Invasive Gynecol*. 2007;14:123-7.
- [4] Rajanna DK, Pandey V, Janardhan S, Datti SN. Broad ligament fibroid mimicking as ovarian tumor on ultrasonography and computed tomography scan. *J Clin Imaging Sci*. 2013;3:8.
- [5] Bansal P, Garg D. Case of Massive Broad Ligament Leiomyoma Imitating an Ovarian Tumour. *J Clin Diagn Res*. 2014;8:136-7.
- [6] Gadre S. Broad ligament myoma at 75 causing clinical, ultrasonic and intraoperative diagnostic dilemma. *Int J Reprod Contracept Obstet Gynecol*. 2014;3:279-81.

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