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# **Case Report**

# Pseudo broad ligament fibroid mimicking ovarian malignancy: a case report

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#### ABSTRACT

Fibroids are smooth muscle benign tumors. They arise most commonly from the uterus but may also rise from extra uterine sites like broad ligament. Uterine fibroids are the most common myomas, while uterine cervix and intraligamentary fibroids are statistically less frequent. This case report of Pseudo broad ligament fibroid with extensive cystic degeneration is presented for its rarity and diagnostic challenges as they mimic pelvic adenexal tumors. Following is the case report of a 40 year old, P4L4, postmenopausal female admitted in the department due to a diagnosed solid lesion in the left adnexa. Patient was asymptomatic 3 months back when she noted gradual swelling and distention over the abdomen. On abdomen examination, a generalized mass was palpable with minimal ascites. On ultrasonography, a large heterogenous mass measuring 200X215 mm seen in pelvic region, arising from left adnexa and extending towards abdomen. During laparotomy, left sided fibroid was removed and sent for frozen section analysis. Histopathological reports revealed spindle cells arranged in fascicles and interlacing bundle with focal areas of myxoid degeneration. Huge pseudo-broad ligament leiomyoma with cystic degeneration may present diagnostic difficulties in differentiating ovarian malignancies even on ultrasound and MRI. This differential diagnosis must be considered prior to surgical management.

Keywords: Ovarian malignancy, Ligament, Fibroid

### **INTRODUCTION**

Fibroids are benign tumors arising from the myometrium affecting up to 30% of all women in the reproductive age group.<sup>1</sup> Broad ligament fibroids account for less than 1% of all leiomyomas. A false broad ligament fibroid develops from the lateral surface of the uterus. A true broad ligament fibroid is conventionally believed to develop from mesenchymal remnants in the uterus, or smooth muscle in the media of blood vessels in the broad ligament. The diagnostic dilemma arises when leiomyomas undergo degenerative changes.<sup>2</sup> Massive cystic degeneration results in a diagnostic confusion with ovarian malignancy.

#### **CASE REPORT**

Mrs. XX, a 40 year old, P4L4, postmenopausal female admitted in the department of obstetrics & gynaecology of Safdarjung hospital due to a diagnosed solid lesion in the left adnexa of the patient.

Patient was asymptomatic 3 months back when she noted gradual swelling and distention over the abdomen. It was associated with loss of appetite. Swelling was not associated with pain. No history of nausea, vomiting or altered bladder and bowel habits. No history of excessive weight loss. She was regularly menstruating. No history of any chronic medical illness in the past. On examination, her vitals were stable. Abdominal examination revealed a hard mass extending from pelvis up to xiphisternum and laterally extending into the flanks, shifting dullness was not present. On pelvic examination the uterus was difficult to identify separately from the mass; it was nontender. There was no palpable lymphadenopathy. Blood investigations included: CA125- 36.4, alpha fetoprotein- 2.9, LDH- 265, CEA-1.2.

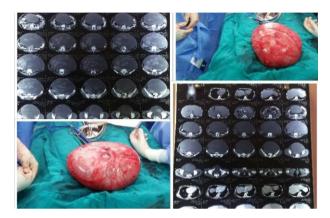


Figure 1: Intra-operative appearance of pseudo broad ligament fibroid.

On ultrasonography, uterus was enlarged measuring 105X61 mm. right ovary was normal. A large heterogenous mass measuring 200X215 mm seen in pelvic region, arising from left adnexa and extending towards abdomen. Patient was taken up for laparotomy after optimisation and pre-operative evaluation. On opening the peritoneum the mass was arising from the pelvis and extending up to xiphisternum with lateral extensions to both the paracolic gutters. It had solid consistency. Normal sized uterus was attached to the lower right lateral pole of the mass with a normal looking right and left ovary. The pedicle of the tumor was arising from the left lateral uterine border extending into broad ligament. Left sided fibroid was removed and sent for frozen section analysis. 3X3 cm peritoneal biopsy was taken and sent for HPE. Cystic and ascitic fluid were sent for cytology and biochemistry. Histopathology revealed spindle cells arranged in fascicles and interlacing bundle with focal areas of myxoid degeneration confirming the diagnosis of leiomyoma.

### DISCUSSION

Uterine leiomyoma can undergo cystic degeneration and is said to be found in 4% of all types of degenerations.<sup>4</sup> The commonest type of degeneration is hyaline seen in 60% of patients.<sup>5</sup>Usually uterine leiomyoma does not present a clinical and sonological diagnostic challenge. Unusual growth patterns or unusual locations make their identification more challenging both clinically and radiologically.<sup>3</sup> When fibroids undergo massive cystic degeneration they may present clinical and sonologic diagnostic difficulties. In this case report a huge palpable mass and ultrasound appearance of extensive tumor with solid areas raised the suspicious of ovarian malignancy. This is in similarity to a case reported by Shabeen Naz et al. The asymptomatic presentation, with a huge palpable mass and ultrasound appearance of extensive tumor with solid cum cystic areas, presence of peritoneal free fluid mimicking pseudo Meig's syndrome, raised the suspicious of ovarian malignancy in their case.<sup>2</sup> However, the attachment of the tumor to the lateral border of uterus can provide a clue to the diagnosis of degenerated broad ligament fibroid. Intraoperative high index of suspicion and careful search can salvage ovaries and uterus in younger patients.

#### CONCLUSION

Huge pseudo-broad ligament leiomyoma with cystic degeneration may present diagnostic difficulties in differentiating ovarian malignancies even on ultrasound and MRI. This differential diagnosis must be considered prior to surgical management.

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