



**Case Report**

**DEGENERATED BROAD LIGAMENT FIBROID MIMICKING AS OVARIAN TUMOUR – A CASE REPORT**

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**ABSTRACT**

We are reporting a case of broad ligament fibroid. Extrauterine fibroid is an uncommon site to occur. Usually these type of tumours remain asymptomatic. When the tumour became large, they present with various clinical manifestations. This rare entity is usually misdiagnosed preoperatively, even with diagnostic imaging. In our cases it mimicking as ovarian tumor. We are reporting this interesting case with clinical, radiological and histopathological findings for its rarity.

**Key words:**

Broad ligament fibroid, Extrauterine adnexal masses, Ovarian neoplasm

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**INTRODUCTION**

Fibroid or leiomyoma is the commonest of all uterine tumors. They are most common in women of child-bearing age. Their classification is determined by their origin and direction of growth. They are divided into three main groups subserous, interstitial and submucous. Extra-uterine fibroids do occur but are not as common as uterine fibroids. Extra-uterine fibroids may develop in the broad ligament or at other sites where smooth muscle exists. (Kumar P, Malhotra N. 2008)

**Case Report**

A 42 year old para 4, presented in gynae OPD with the complaints of pain abdomen and abdominal distension for 7 months. It was gradual in onset and progressive in nature. She also had difficulty in passing urine. She denied history of menstrual abnormality. On examination, the patient was afebrile, pulse was 82/min and blood pressure was 120/70 mmHg. Abdominal examination revealed a cystic, non tender mass of 19x17cm size, arising from the pelvis, with restricted mobility. On speculum examination, cervix could not be visualized. On per vaginum examination, cervix was deviated towards left side, the abdominal mass was felt through anterior and right fornix, uterus was not felt separate from the mass. On per rectum examination rectal mucosa was intact.

Her hemoglobin was 10.2g%. Serum CA-125 (cancer antigen 125) value was 14U/ml. Liver and renal function tests were within normal limits. Ultrasonographic examination of abdomen revealed a solid cystic lesion of size 19x17 cm with multiple septations with flow on solid part on color doppler seen extending from pelvis to epigastrium. Uterus was normal. Right kidney showed grade 1 hydronephrosis with dilated pelvis and upper ureter. Left kidney was normal. IVP

revealed right ureteric obstruction with hydronephrosis. After clinical and radiological assessment provisional diagnosis of an ovarian tumour was made.

Exploratory laparotomy was performed. Peroperatively, right sided parovarian mass of size approximately 25 cm × 19 cm extending into the broad ligament was present with smooth surface and cystic consistency. Uterus was multiparous size and was lifted up outside the abdomen along with the mass. Bilateral tubes and ovaries were healthy. Anterior leaf of the broad ligament was opened along the round ligament. Enucleation of the mass was done. Pedicle attached to right lateral uterine wall was removed. Cut section of the tumor showed solid and cystic areas which contained 1.5 litres of altered haemorrhagic fluid. Tumor was sent for frozen section which showed areas of hyalinization and spindle cell proliferation. The histopathological report shows spindle shaped cells arranged in whorls and interlacing fascicles with marked areas of hyaline and cystic change. Final diagnosis of pseudo broad ligament fibroid was made.

**DISCUSSION**

Epithelial tumours are the most common broad ligament tumours, whereas mesenchymal tumours are rare. Among the mesenchymal tumours, the most common one is leiomyoma. (Thor AD, Young RH, Clement PB.1991) As leiomyomas enlarge, they may outgrow their blood supply and undergo degeneration. These include hyaline, cystic, myxoid and red degeneration. (Low SCA, Cong CL.2004) Hyalinisation is the most common type of degeneration, occurring in upto 60% of cases.

Leiomyomas commonly present as menstrual disturbances, reproductive dysfunctions and pressure symptoms like

bladder and bowel dysfunctions. These undergo secondary changes which include degeneration, infarction, necrosis, haemorrhage and they rarely show sarcomatous changes. (Berek JS.2007) Broad ligament leiomyoma can originate from the uterus and invade the broad ligament or it can originate from broad ligament itself. These benign tumors are usually asymptomatic (Stewart EA.2001). Fibroids in the broad ligament though not so common, but are well known for achieving enormous size, mimicking malignancy. This case reports pseudo broad ligament fibroid where the patient presented with a mass per abdomen, had features of malignancy both clinically and radiologically, but histopathology confirmed it as a benign broad ligament fibroid. A similar case report has also been reported by Godbole *et al* for its rarity and diagnostic difficulties it posed.

Degenerative changes in the leiomyomas are considered due to inadequate blood supply. Myxoid and calcific degenerations are the commonest form of degeneration seen in broad ligament fibroid. The fibroid in our report had undergone hyaline and cystic degeneration. Others have reported broad ligament fibroid with calcific degeneration. (Yuel VI, Kaur V.2006)

## **CONCLUSION**

Extra-uterine fibroids occur infrequently, although they are histologically benign, may mimics ovarian tumors on clinical and radiological examination. Broad ligament leiomyoma should be kept important differential diagnosis for such solid adnexal or ovarian mass.

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