



## RESEARCH ARTICLE

### BROAD LIGAMENT FIBROID MIMICKING AS OVARIAN FIBROMA

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#### Abstract

Fibroid uterus is the most common benign tumor of uterus. Extrauterine fibroids are rare and most common extra uterine fibroid is broad ligament fibroid. Broad ligament fibroids are difficult to diagnose and treat. Most often misdiagnosed as ovarian malignancy. In our case ovarian fibroma was suspected and ultrasound pelvis, CT and MRI reports suggestive of ovarian fibroma. Intraoperative findings suggestive of Broad ligament fibroid, fibroid excision was done along with abdominal total hysterectomy and bilateral salpingo oophorectomy. Diagnosis was confirmed by intraoperative findings and histopathological report.

**Conclusion:** broad ligament fibroid should kept as important differential diagnosis for solid adnexal or ovarian mass.

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#### Introduction:-

Fibroids are most common neoplasia of uterus and most common in reproductive age women. They tend to be multiple and size may vary from peanut size to head of the fetus. They are slow growing tumor and takes 3 to 5 yrs to be clinically palpable. These are classified into submucosal, intramural and sub serosal fibroids. Extra uterine fibroids are rare and most common extra uterine is broad ligament fibroid. Myomas are derived from smooth muscle cell rests, broad ligament fibroid arises de novo either from wall of the vessels or from other structure.

Common symptoms include menstrual disturbances, dysmenorrhea, pressure symptoms. secondary changes include degeneration, infection, hemorrhage, necrosis and neoplasm.

Rarely malignant changes do occur. About 1 in 1000 lesions become malignant, typically as a leiomyosarcoma on histology. Typical sign is growth after menopause or rapidly growing leiomyoma.

#### Case report

A 45-year-old multiparous lady, married for 29 years, last child birth 21 years back, tubectomised, came with complaints of backache, pain and heaviness in the lower abdomen for the past 2 months. She was a known case of Hypertension on treatment. She had no history of bowel or bladder disturbances, weight loss, anorexia, white discharge or bleeding pervaginum. Her menstrual cycles were regular and not attained menopause.

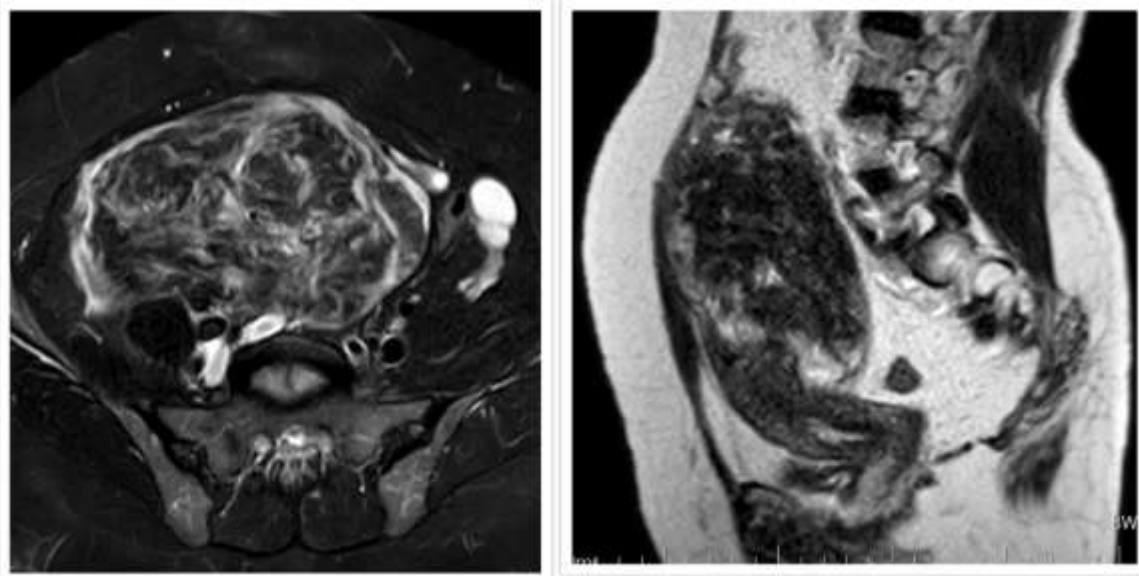
On examination, the patient was afebrile. Her vital signs were stable. Her abdomen was distended and mass of size 15 x 10 cms occupying lower abdomen. On speculum examination, cervix was drawn up, and no abnormal

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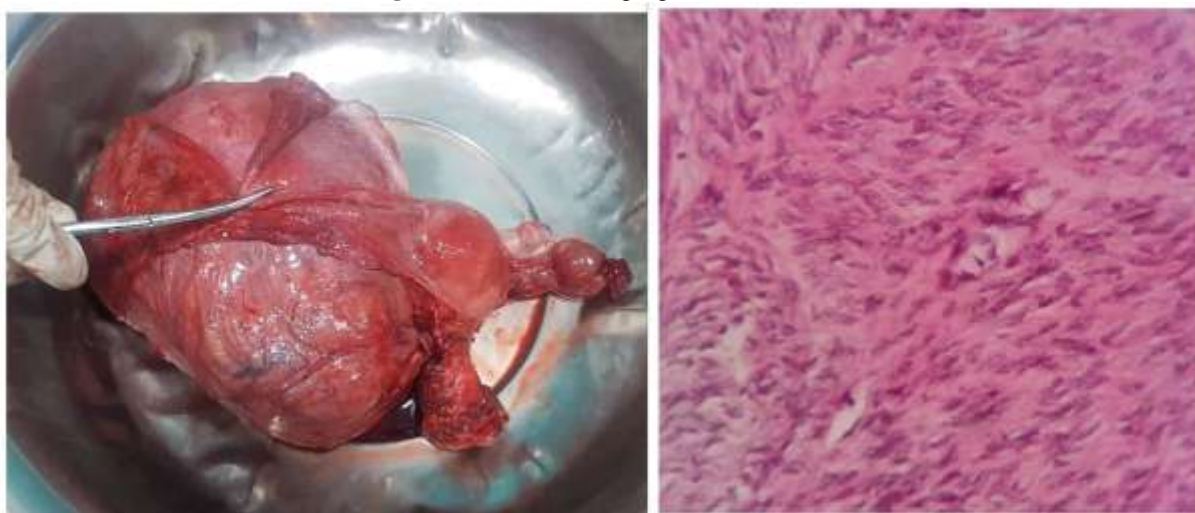
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discharge was seen. On vaginal examination, a mass was felt in the right fornix of size approximately  $15 \times 10$ cms; with regular margins and firm in consistency. uterus could be made out separately.

Routine pre-operative blood investigations were within normal limits. Serum CA-125 titre was 11.9 m IU/L. On ultrasonography, a large well-defined, heterogenous hyperechoic mass measuring  $17.8 \times 7$ cms was seen in the right adnexa—most likely to be ovarian fibroma; right ovary was not seen separately from the mass; left ovary was normal. A probable diagnosis of right ovarian mass was made. On Magnetic Resonance Imaging (MRI) of abdomen and pelvis, there is evidence of T2 hypointense lesion noted in right adnexa measuring  $14 \times 8$  cms; right ovary could not be seen separately. The MRI appearance was suggestive of ovarian neoplasm. Final diagnosis based on the MRI of abdomen and pelvis was right ovarian fibroma. The patient was taken up for an elective laparotomy after a provisional diagnosis of ovarian fibroma was made. Intra-operatively, an abdomino-pelvic mass in the right side of size approximately  $13 \times 10$ cms was seen arising adjacent to the uterus in between the folds of the broad ligament pushing the ureter medially. Bilateral tubes and ovaries were normal. As the tumour was distorting the anatomy, careful dissection was done to prevent ureteric injuries. Excision of tumour with total abdominal hysterectomy and bilateral salpingo-oophorectomy was performed and the specimen was sent for histopathological examination and was confirmed to be fibroid. Post-operative course was uneventful.



**Figure 1:-** MRI showing right adnexal mass.



**Figure 2:-** Broad ligament fibroid with hysterectomy specimen & histopathology showing concentrically arranged smooth muscle cells.

**Discussion:-**

Occasionally, fibroids may become adherent to surrounding structures like omentum or broad ligament and develop auxiliary blood supply and lose their original attachment from uterus. Literature states that fibroid may originate from uterus and get adherent to broad ligament [pseudo broad ligament fibroid] or it may originate from smooth muscle elements of ligament which are hormone sensitive [true broad ligament fibroid]. Extra uterine mass compresses the surrounding structures and cause obstructive symptoms. Most of the fibroids are small and asymptomatic. Broad ligament fibroid has enormous potential to grow to a very large size and can present with pressure symptoms of pelvic pain, bladder and bowel disturbances.

In our case, patient presented had heaviness and pain in the lower abdomen. Large fibroid can become impacted in pelvis leading to ureteric obstruction, urinary retention and constipation. Secondary changes may occur in leiomyomas and the most common changes are degeneration, infection, haemorrhage, and necrosis.

Clinical and radiological investigations suggestive of ovarian neoplasm. The serum levels of CA 125 were within normal limits. Elevated levels are seen in metastatic ovarian tumours, but can also seen in endometriosis, serous benign tumours, and endometriomas. Histopathology plays important role in the diagnosis of such cases.

Diagnosis of broad ligament fibroid is always difficult and challenging. The diagnostic modalities include ultrasonography, CT, MRI. Transvaginal sonography can diagnose broad ligament fibroid.

**Conclusion:-**

Broad ligament fibroids occur infrequently, but the diagnosis is challenging and treatment is difficult because of its anatomical relation with ureter and other important structures. Extra uterine fibroids mimic ovarian tumours on clinical and radiological examination. Differential diagnosis includes pedunculated leiomyoma, omental and retroperitoneal tumours.

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