A CASE OF BROAD LIGAMENT LEIOMYOMA WITH PRIMARY INFERTILITY CAUSING URINARY RETENTIONSanthosh Kumar Sahu¹, K. Durgavati²**HOW TO CITE THIS ARTICLE:**

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ABSTRACT: A broad ligament leiomyoma is a leiomyoma that occurs in relation to the broad ligament and is sometimes considered as variation in terms of location for a uterine leiomyoma. While in most cases broad ligament leiomyomas are asymptomatic, patients may present pelvic pain or a palpable pelvic/ abdominal mass or retention of urine. Pelvic pain may be as result of pressure effects on adjacent organs or a complicating torsion.

KEYWORDS: Broad ligament fibroid, infertility, retention urine.

CASE: A 28 year old nulligravida, a case of primary infertility, married for 10 years was presented to KIMS Hospital on 23. 07. 2014 with c/c of acute retention of urine for one day.

Her Previous menstrual cycle was regular, normal flow, lasting for 4-5 days, with a 28 – 32 days interval, LMP-13.07.14. No h/o of dysmenorrhea, pain abdomen, excessive bleeding or clots during menses.

She was married for 10 years, a case of primary infertility. She had never taken any contraceptives since her marriage.

She was not a known case of any chronic medical or surgical illnesses including TB, DM, ASTHMA, SICKLING, HYPERTENSION.

No h/o undergoing any surgical procedure .None of her family members were suffering from any chronic medical illness.

She was from low socio economic status. Addicted to tobacco only, literate up to classes 5th, regular sleep pattern .Regular bowel and bladder habit, but since last one day she had acute retention of urine. On general examination the lady is of average build and nutrition. No pallor, Temp- 98.4°F, BP 130/80 mm Hg, Pulse 78 per minute, RR 14 per minute. No significant lymphadenopathy. Systemic examination was normal.

Abdomen was distended. On per abdominal examination, a suprapubic mass of 14wks size, globular, firm, restricted mobility above and down, side to side freely mobile, non-tender. Getting below the swelling is negative, smooth surface, regular margin.

PER SPECULUM: Cervix healthy, nulliparous os , no abnormal discharge or bleeding.

PER VAGINA: cervix was pulled up, a globular mass of 14wks size, firm, restricted mobility above-down, freely mobile side to side was found. Cervix moved with elevation of the mass, more felt in the anterior and right fornix, uterus was felt separately. A small groove was found between the mass and uterus, pod was free.

PROVISIONAL DIAGNOSIS: Leiomyoma uterus with long standing primary infertility, retention of urine.

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HUSBAND HISTORY: Addicted to gutkha, alcohol since last 20years, a shop-keeper. No major medical illness or Surgery in past.

INVESTIGATIONS: Hemoglobin 10.2 gm%, Blood Urea-32 mg/dl, Serum Creatinine 0.6 mg/dl, Fasting blood sugar 80 mg/dl, Na - 144meq/l, K-3.8meq/l, Urine RE/ME - WNL, Urine c/s- no growth, TSH -2.8miu/ml, ESR -10 mm 1st hr, Sickling : Negative. Semen analysis of husband reveals azoospermia.

ULTRASONOGRAPHY: Uterus AV, 68X40X38mm, ET - 9mm, a hypoechoic, heterogenous mass like lesion 9cm, 8cm was seen adjacent to uterus on the right side. Both ovaries are normal. POD was free. Management - EUA and EB done. Planned for laparotomy. Intra operatively uterus was of normal size and was found pushed to the left side. Right side ovary was normal. Left ovary was slightly enlarged having multiple cysts. Ovarian drilling was done.

A myoma of size 10 x 10 cm was found on the right antero-lateral aspect of the uterus within the Broad ligament. Round ligament was found on right lateral of the myoma and was found stretched. Myoma was shelled out from its bed. Methylene blue dye test showed both tubes were patent. Rests of the abdominal organs were normal. Sutures were removed on the 8th postoperative day. Patient was discharged in a satisfactory condition and advised for follow up.

PATHOLOGY: Gross - Myoma of size 10 cms x 10 cms and weighing 450 gms. External surface was smooth. Cut section shows predominantly solid areas along with cystic areas containing yellowish gelatinous substance, Uterus 7 cms x 5 cms x4 cms. Cervix normal, Right ovary was normal, Left ovary enlarged with multiple cysts.

MICROSCOPIC: Mass showed benign spindle cell tumour of the smooth muscle origin with marked hyaline degeneration - Leiomyoma of the broad ligament.

DISCUSSION: Leiomyoma is a benign smooth muscle tumor that most commonly arises from the uterus but may also be found in the cervix, uterine ligaments and rarely in the ovaries or fallopian tubes. Myomas and fibromyomas are not uncommon in the round, ovarian and broad ligaments,⁽²⁾ they are found in association with similar uterine tumours and their pathology and complications are the same as fibroids. The overall incidence of broad ligament leiomyoma is however less common. Although benign, leiomyomas they can attain a huge size.

Leiomyoma occasionally occurs with unusual growth pattern or in unusual locations that makes their identification more challenging, both clinically and radiologically. On developing a long tenacious stalk, the subserosal leiomyoma may become a wandering or migrating leiomyoma. Occasionally such masses become adherent to the surrounding structures such as broad ligament or omentum or retroperitoneal connective tissue, where they receive auxillary blood supply and lose their original attachment to the uterus.

They are then called as parasitic leiomyoma.⁽¹⁾ On histological evaluation, they exhibit features similar to those of their uterine counterparts. The location of tumors often determines the nature of the symptoms.⁽⁴⁾ In our case, the patient had a short history of acute retention of urine, but

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no pain. Patients usually present with lower abdominal pain, mass per abdomen or pelvic mass. Bose et al⁽³⁾ have reported a case of calcified broad ligament fibroid.

Rarely, pedunculated leiomyoma undergo torsion and present with acute abdomen. Giant fibroids are known to arise from the uterus, but occasionally from the broad ligament.^(4,5) Buckshee K et al⁽⁶⁾ reported an unusual and rare case of broad ligament leiomyoma with massive ascites and bilateral pleural effusion. A similar case report has also been reported by Gowri et al⁽⁴⁾ for its rarity, and the diagnostic difficulties it posed. Bose et al have also reported a similar case of calcified broad ligament fibroid.⁽³⁾

Ultrasonographic features play an important role in diagnosis of parasitic and pedunculated leiomyoma.⁽⁷⁾ Since parasitic leiomyoma are separated from the uterus, they are easily mistaken for adnexal tumors such as ovarian tumors. In our case, the tumor was large and pedicle was very small and adherent to the broad ligament. We confirmed the diagnosis of this case on histopathology.

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