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Case Report

LARGE LEIOMYOMA OF THE BROAD LIGAMENT: A CASE REPORT

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ABSTRACT
Huge fibroids arise usually from the uterus but very rarely from the broad ligament. Large fibroids often undergo hyaline, cystic, and at times, red degeneration. In consequence of their various size and nature (pedunculated or sessile), clinically leiomyoma may present variably. We are presenting a case of large leiomyoma of broad ligament in a 20-year-old female patient who presented with complaints of lump abdomen. On clinical and radiological examination, it was found to be a left sided mass extending from the level of pelvic region up to level of xyphisternum. The differential diagnosis included rare possibility of giant fibroid with cystic degeneration. The patient underwent exploratory laparotomy with removal of the broad ligament fibroid and diagnosis was confirmed with histo-pathological examination. We present this case as a rare presentationon account of its age of the patient and weight of the tumour.

Keywords: *Broad Ligament, Leiomyoma, Extra Uterine, Tumour*

INTRODUCTION
Leiomyoma are most common benign tumours of the female genital tract. Uterine leiomyoma is present in 20% of women in reproductive age group, and incidence increases with age (Kumar and Malhotra, 2014).
Leiomyoma are described as being subserous, interstitial, and submucous according to their relationship to the peritoneal coat and to the endometrium (Kumar and Malhotra, 2014).
Extra-uterine fibroids may develop in the broad ligament or at other sites where smooth muscle exists (Kumar and Malhotra, 2014).
Leiomyoma of the broad ligament is not uncommon (Kumar and Malhotra, 2014). Broad ligament leiomyomas are of two types: either a uterine tumour (usually cervical) which grows into the broad ligament (false broad ligament tumour) but preserves a uterine attachment or a primary (true) broad ligament Leiomyoma arising from the sub peritoneal connective tissue of the ligament (Kumar and Malhotra, 2014).
On account of its rarity, there may be diagnostic difficulties which may lead to erroneous diagnosis and management (Sahu and Durgavati, 2014; Jagtap *et al.,* 2013). On rare occasions, these tumours may present with unusually huge size or unusual clinical manifestations.

CASES
22-year-old unmarried girl attended Gynaecology OPD of Gauhati Medical College with complaints of lump abdomen since two and half years ($2^{½}$) yrs. It was gradual in onset and was progressively increasing in nature.
Initially the lump was located in lower abdomen and gradually increased to reach the present huge size. Initially it did not hamper her daily work but later on she was unable to do heavy work or bend forward since the lump reached umbilicus and at the time of admission she was unable to get up from squatting position without help.
She also complains of increased frequency of micturition since the lump reached umbilical level and she has to pass urine every half hourly. There was no history of incomplete evacuation of bladder or involuntary passage of urine. There was no associated pain abdomen or any menstrual abnormalities.
The patient also complains of difficulty in breathing from last 2 weeks. Initially it occurred in lying down position for which she has to take two pillows but later on it hampers her sleep and she has to spend most of the time in sitting position. There was no history of associated cough or chest pain.

Case Report

There was no history of tuberculosis or any contact with active tuberculosis patient. She had no history of any hormonal therapy. Her family history was not significant.

On abdominal palpation, a large soft to firm, mass was felt, extending from pelvis up to xyphisternum (Figure 1, a). On per speculum examination the cervix and vagina were healthy. On bimanual examination the uterine size was difficult to assess. On haematological investigation, the haemoglobin was 10.6 gm /dl, total leucocyte count-5000/cmm.

The value of serum TSH, CA-125, blood sugar, platelets and viral profile were within normal limits. Urine examination revealed few epithelial cells. The liver and kidney function tests were found to be within normal limits.

Ultra sonographic examination showed whole abdomen is filled with mixed echogenic mass suggestive of Mucinous cystadenoma of ovary.

CT abdomen showed large solid hypo-dense pelvic abdominal lesion possibly uterine origin with eccentric enhancing solid component distending abdominal cavity and abdominal organs and bowels without signs of overt invasion suggesting possibility of a large degenerated fibroid.

The patient was operated abdominally with enucleation of broad ligament mass.

Gross Findings

The tumour mass included a large nodular cystic mass adjacent to the uterus in the left broad ligament with bilateral normal ovaries. Externally the broad ligament at the mesovarium showed a single oval, pinkish well-circumscribed firm tissue mass attached to the left broad ligament with adhesion to surrounding structure (Figure 1, b). The mass measured 37x18x18 cm and weighed 27kg (Figure 2, a). Cut section of the mass revealed a grey white firm whorled appearance. The broad ligament mass was enucleated and sent for HPE.

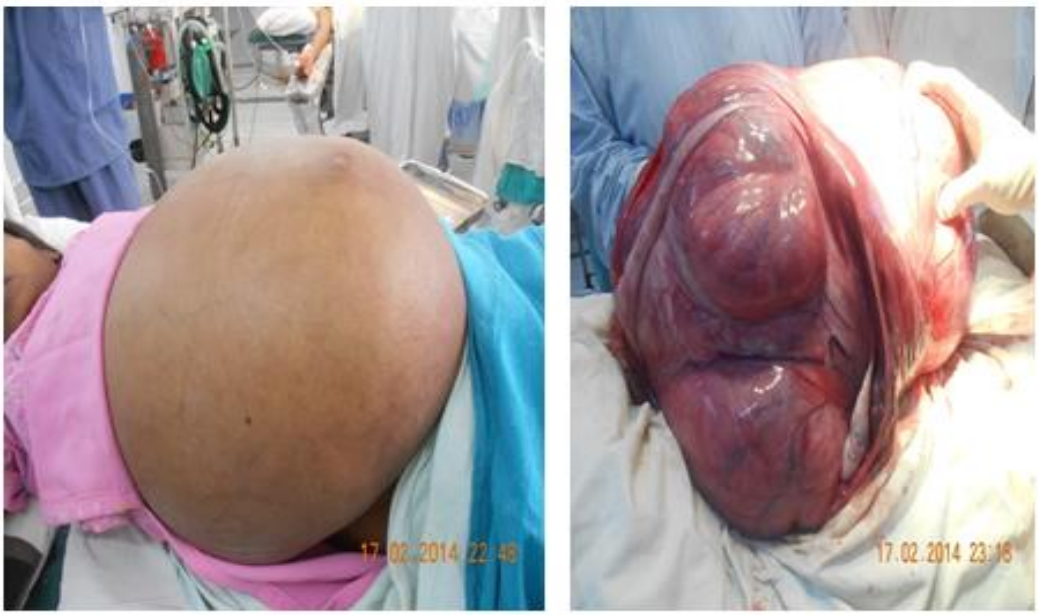

Figure 1: a) Huge Abdominal Lump b) Intraoperative Anatomical Picture

Microscopy

Sections show an oedematous soft tissue tumour with recognisable benign smooth muscle bundle at the periphery. Few thick wall blood vessels are present. Features are suggestive of leiomyoma with hydropic degeneration (Figure 2, b).

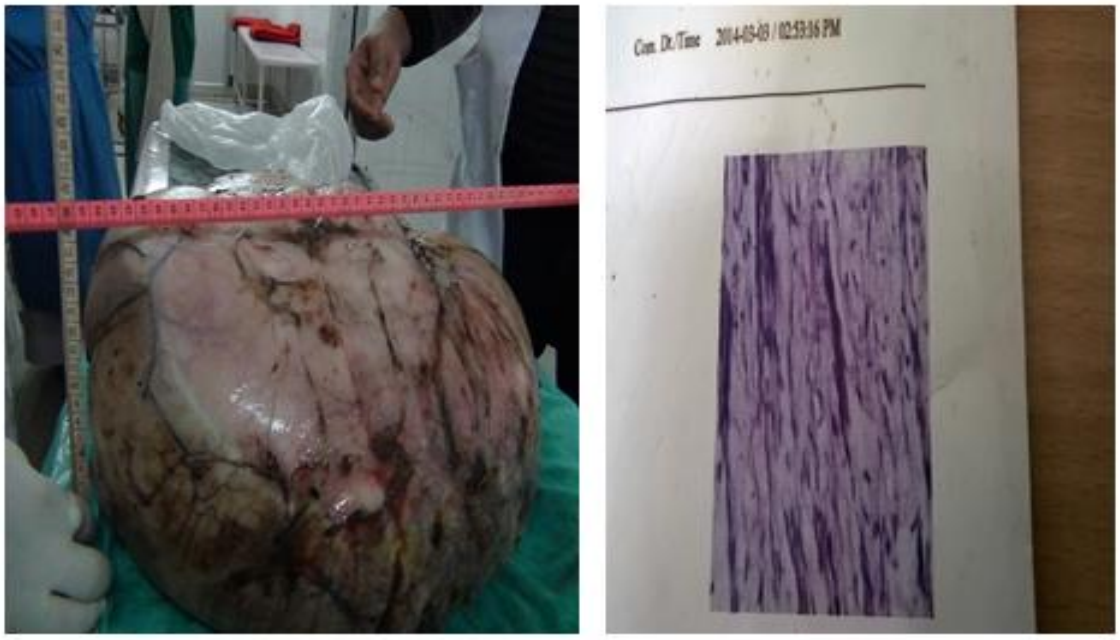

Figure 2: a) Measurement b) Histopathology Picture

DISCUSSION

Leiomyoma usually arises from the uterus but may also be found in the cervix, broad ligaments and very rarely in the fallopian tubes or ovaries. However, the broad ligament leiomyoma is less common. It has also been suggested that fibroids that are adherent to the broad ligament originate from hormonally sensitive smooth muscle elements of that ligament. On histological evaluation, they exhibit features similar to those of their uterine counter parts. The location of tumours often determines the nature of the symptoms. Clinically, these lesions may manifest as extra uterine pelvic masses that compresses adjacent organs and producing symptoms of varying degrees of urinary outflow obstruction (Kumar and Malhotra, 2014; Sahu and Durgavati, 2014). In our case, the patient had a very long history of abdominal discomfort. Patients usually present with lower abdominal pain, mass per abdomen or pelvic mass. Giant broad ligament leiomyoma also reported by another author (Jagtap *et al.,* 2013). Another author reported a case of broad ligament leiomyoma presenting as pseudo Meig's syndrome (Chourmouzi *et al.,* 2010). In our case the age of the patient was only 20 years old and the weight of the broad ligament leiomyoma was found to be 27 kg which was somewhat peculiar as till now no literature has mentioned such a huge case.
Ultrasonography especially transvaginal one may be of help in diagnosing broad ligament fibroid as it allows apparent visual partition of the uterus and ovaries from the mass. In our case, the tumour was large and pedicle was very small and adherent to the broad ligament. We confirmed the diagnosis of this case on histopathology.

Conclusion

The broad ligament leiomyoma as they occur infrequently and with their unusual presentation and clinical and radiological features it is sometimes difficult to diagnose correctly. We are reporting this case on account of its rarity regarding her age and weight of the tumour.

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