

“UTERINE FIBROID A DIAGNOSTIC DILEMMA”

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ABSTRACT:

Uterine leiomyomas (fibroids or myomas), benign tumors of the human uterus, are the single most common indication for hysterectomy. They are clinically apparent in up to 25% of women and cause significant morbidity, including prolonged or heavy menstrual bleeding, pelvic pressure or pain, and, in rare cases, reproductive dysfunction. Thus, both the economic cost and the effect on the quality of life are substantial. Surgery has been the mainstay of fibroid treatment. This case presents a 51 year old, asymptomatic big fibroid diagnosed incidentally on clinical examination and imaging, which was managed timely and the patient recovered because of thorough clinical examination even in asymptomatic patients.

Keywords- leiomyoma, morbidity, abdominal mass

Introduction:

Uterine leiomyomas are the most common solid benign uterine neoplasms that arise from the overgrowth of smooth muscle and connective tissue in the uterus. It is estimated that 20-40% of women of reproductive age have uterine leiomyoma; the prevalence increases during the reproductive age and decreases after menopause.^{1,2}

Uterine leiomyomas have been classified according to their location: submucosal, intramural, and subserosal. Amongst these subserosal variety is the least symptomatic. However pedunculated subserosal myomas can be acutely symptomatic owing to torsion with obstruction of blood vessels, which requires immediate surgery. They often mimic ovarian torsion like symptoms.³ Clinical examination and ultrasonography can diagnose all varieties of fibroids.⁴

The potential for benign tumors to outgrow quietly without causing specific symptoms is reasonable because of the large volume of the abdominal cavity, flexibility, and slow growth rate of the tumor⁵.

Case report:

A 51-year-old female, Perimenopausal P2L2-tubectomised presented to an orthopedics OPD with complaints of bilateral lower limb pain and pedal edema for 4-6 months. Lower limb Doppler was advised and it revealed superficial dilated veins along the medial aspect and extensive subcutaneous edema in both legs. There was an incidental finding of a large heterogeneous mass in the abdomen with significant vascularity in the myometrium and parauterine region. Hence the patient was referred to us.

With us, besides her pedal edema, she also complained of increased frequency of micturition for 2 months, which was not associated with dysuria or a burning sensation. She didn't have any discomfort, pain, or dragging sensation in the abdomen.

Menstrual history- Her cycles were delayed, once every 2-3 months, lasting for 5-6 days with the average flow, for the last 1 year. Previous cycles were normal. She has 2 living issues, both delivered vaginally. and the last childbirth was 28 years back.

General physical examination was within normal limits except for bilateral pitting pedal edema. A midline mass was felt per abdomen, which was reaching up to the umbilicus, firm in consistency, and freely mobile from side to side. No tenderness was present. On gynecological examination, the cervix and vagina were found healthy. A small polyp was seen protruding from the cervical os. On bimanual examination, uterus felt 10 -12 week in size. A separate mass of 24-week size felt superior to the uterus, and clinically appeared separate from the uterus No other mass was felt in the pelvis or adnexa.

At this stage, various possibilities came to our minds. Consistency of the mass was that of a fibroid. Hence our probable diagnosis was sub-serous pedunculated fibroid. Ovarian mass or masses arising from the other abdominal organ were also kept in mind.

Routine lab parameters and PAP smear were done and they were within normal limits.

USG abdomen and pelvis revealed a midline mass in the abdomen 20x9x20 cm with dilated vessels. To know the exact nature and size of the mass we went ahead with an MRI abdomen and pelvis with a contrast which revealed a large pedunculated subserosal fibroid 14x8x22cm arising from the posterior wall of the uterine fundus with grossly dilated vessels in the pedicle of the mass and periuterine area.. Other viscera in the abdomen were found normal.

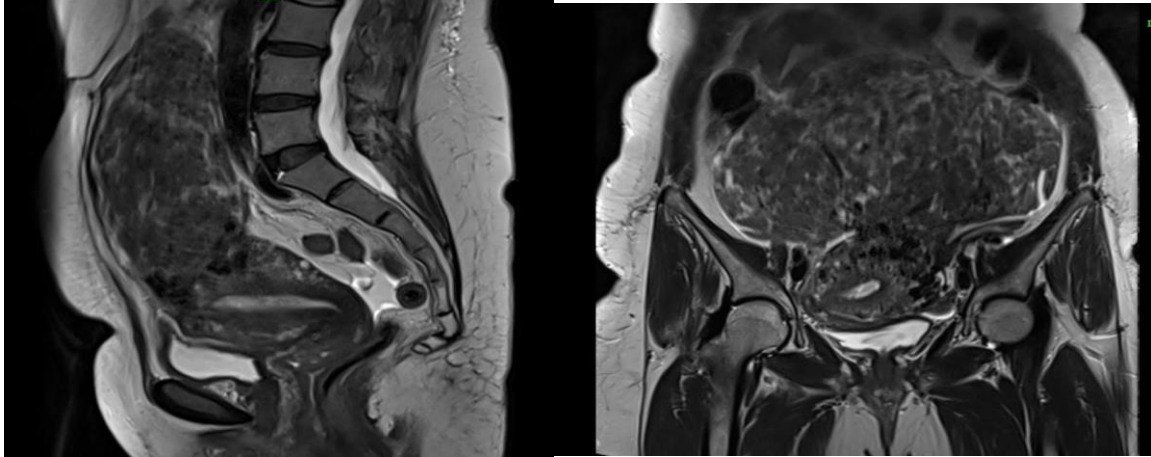


Fig1-sagittal section and the coronal section of MRI show a huge mass in the abdomen, which connects to the uterus with the help of a pedicle.

After completing the workup and pre-anesthesia checkup we proceed with Laparotomy.

On opening the abdomen, we found straw color ascitic fluid, which was sent for cytology. A firm solid mass of 24x14x10cm in size was found arising from the fundus of the uterus, with dilated engorged periuterine vessels in broad ligaments. This mass was attached by a thick pedicle of 5x3 cm. It also contained engorged vessels. The upper surface of the mass was rough but the serosa was not breached. Uterine vessels were dilated almost like iliac vessels.

Intraoperative findings-



Fig2-Mass is connected to fundus of uterus by thick pedicle, and dilated periuterine vessels.

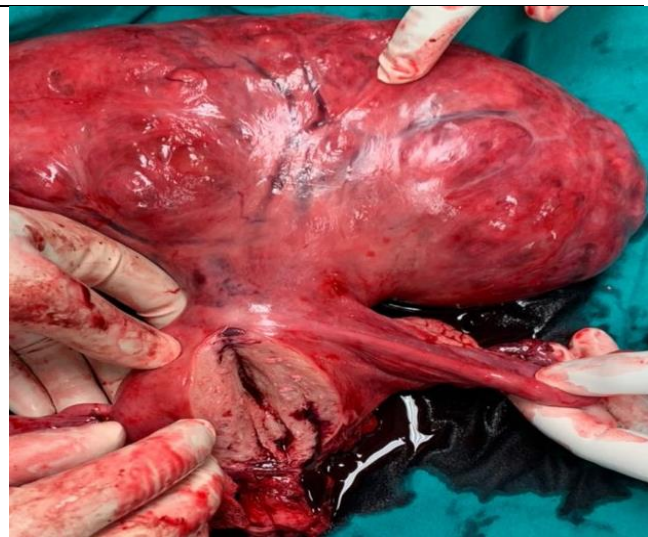


Fig3-specimen picture showing uterus with cervix with bilateral tubes and ovary with a huge mass. Cut section of Uterus shows thickened myometrium

Both ovaries and tubes appeared normal, there were a few small cysts in the right ovary. There was no adhesion with neighboring viscera. No omental deposits were seen. No significant palpable pelvic or para-aortic lymph node was found.

From the gross appearance of the mass and other intraoperative findings in the abdomen, we decided to go ahead with a Total Abdominal Hysterectomy with bilateral salpingo-oophorectomy.

The surgery was uneventful and Total blood loss was ~300 ml. The mass weighed 2 kg. The Postoperative period was uneventful and the patient was discharged on day 4. Patient had an uneventful postoperative recovery. She reviewed on 7TH postoperative day for suture removal, suture removed and wound was healthy.

On subsequent follow-up, her pressure symptoms like pedal edema and urinary complaints were relieved.

Cytology for peritoneal fluid was negative for malignant cells. Histopathology of the mass reported as leiomyoma with hypertrophied myometrium

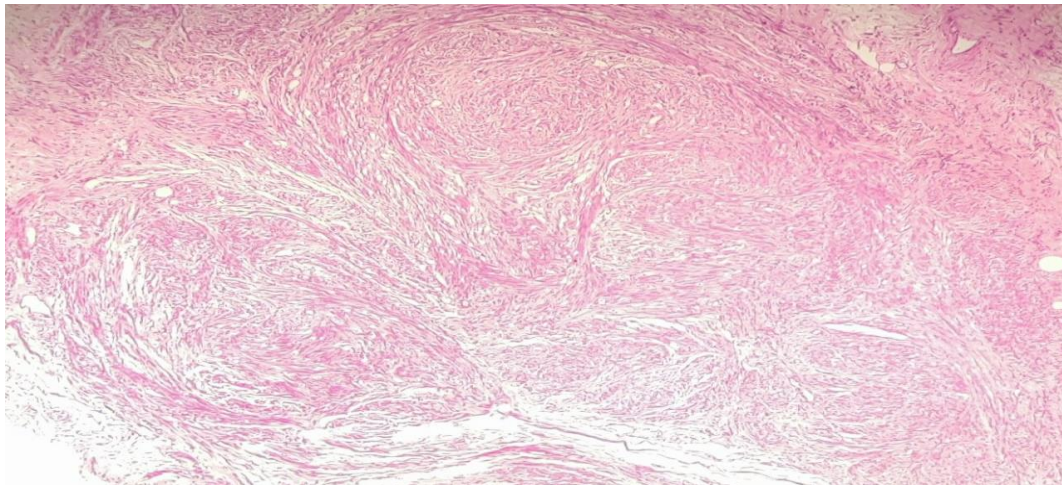


Fig4- Histopathology of mass shows whorl appearance

Final Diagnosis - Large Subserosal leiomyoma

DISCUSSION

Leiomyoma (or fibroid) is the most frequently diagnosed gynecologic tumor, occurring in 20–40% of women older than 30 years. Leiomyomas arise from the overgrowth of smooth muscle and connective tissue of the uterus⁶. Histologically, a monoclonal proliferation of smooth muscle cells occurs. The growth of a leiomyoma seems to depend on estrogen. As long as a woman with leiomyomas is menstruating, the leiomyomas will probably continue to grow, usually slowly.⁷

Leiomyomas can undergo various types of degeneration as they enlarge. These include hyaline or myxoid degeneration, cystic degeneration, dystrophic calcification, and red degeneration⁸. Among them, hyalinization is the most common type of degeneration, occurring in up to 60% of cases.⁹ rarely, uterine leiomyoma may undergo malignant degeneration to become a sarcoma. The incidence of malignant degeneration has been estimated to be as low as 0.2%.

Preoperative imaging studies are useful to define the extent of the tumor and to assess the likelihood of malignancy in cases of expansive or infiltrative growth. Ultrasonography is the preferred technique for the initial evaluation of gynecologic pathology because of its ubiquitous availability, noninvasiveness, and convenient cost–benefit ratio.¹⁰ Preclinical ultrasound imaging is appropriate with regard to diagnosis, surveillance, and prevention of myoma-associated complications. Sometimes further evaluation with MRI may be required when ultrasonography is not conclusive or there is suspicion of sarcoma.

CONCLUSION

To emphasize that, such a large mass in the abdomen can present without any symptom whatsoever, except for minor symptoms. The case is an example of the relevance of a thorough clinical examination, even in an

asymptomatic patient. The usefulness of imaging in present day practice help in preventing a delay in diagnosis and therapy of treatable condition such as fibroid.

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