

Vaginal Wall Leiomyoma: A Rare Entity – Case Report

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Abstract: LEIOMYOMAS are common benign tumors of uterus, incidence being 20-40% in women of reproductive age and it increases with age. However, vaginal leiomyomas remain an uncommon entity with only 330 cases reported in literature till now. Vaginal leiomyomas are most commonly located in anterior vaginal wall. They present with varied clinical features. Sometimes they are associated with leiomyomas elsewhere in the body. We report a case of primary leiomyoma of vagina arising from anterior wall and presenting with lower abdominal pain and feeling of something coming out per vaginum.

Keywords: Leiomyoma, Vagina

I. Case Report

A 40 year old female P3L2 (previous 3 LSCS) was referred to our OPD from CHC with chief complaints of something coming out per vaginum and pain lower abdomen since 3 months. There was no history of dysuria, frequency of micturation or urinary retention. There was no history of dyspareunia.

Menstrual History: Her LMP was 15 days back. Bleeding occurred for 4 -5 days after every 28-30 days. Flow was normal and there was history of dysmenorrhoea.

Obstetrics History- She was P3L2 (previous 3LSCS) with last date of delivery 10 years back.

Medical History- She was known case of hypertension since 2 years, on erratic treatment.

On Examination

- Patient was afebrile, well haemoglobinised. Her vitals were within normal limits. Per Abdomen- was soft, non tender, non distended.
- **Per Speculum-** There was a firm mass arising from anterior vaginal wall, adherent to lateral vaginal wall, cervix was pulled up.
- **Per Vaginum-** Uterus was normal size, anteverted. Fornices were free, a firm mass 6x5 was felt in anterior vaginal wall away from cervix, the mass was irreducible.
- **Investigations-** Her Hb was 10gm/dl. Rest all lab parameters were within normal limits.
- **Ultrasonography** – Revealed a 5.5x6.3 cm large hypo echoic mass arising from anterior wall of vagina, not ruling out possibility of cervical fibroid. There was no other abnormality.
- **Cystoscopy-** Normal study
- **MRI** - showed a solid mass of low signal intensity in T1- and T2-weighted images, with homogenous contrast enhancement.

Decision for EUA was taken. Patient was catheterized. There was a firm mass 5x5cm arising from anterior wall of vagina. The mass was separate from cervix. Hysteroscopy was done which was normal. Endometrial biopsy was taken. Vertical incision was given over the mass and it was separated from capsule and bladder by sharp dissection and removed enmass through vaginal route. Redundant vaginal wall excised and purse string sutures were given to obliterate dead space. Vaginal wall was closed in single layer. Gross examination revealed a 5 x 5 cm solid mass with a whorling appearance in the cut section. The tumor was then sent for histopathological examination. Microscopic examination revealed a well-circumscribed leiomyoma underlying the squamous epithelium.



II. Discussion

Vaginal leiomyoma is a rare entity with only around 330 reported cases since the first described case in 1733 by Denys de Leyden.¹ Leiomyomas in female genital tract are common in the uterus and to some extent in the cervix followed by the round ligament, utero-sacral ligament, ovary, and inguinal canal. Vaginal leiomyomas are commonly seen in the age group ranging from 35 to 50 years and are reported to be more common among Caucasian women.² They usually occur as single, well-circumscribed mass arising from the midline anterior wall^{1,3} and less commonly, from the posterior and lateral walls. They may be asymptomatic but depending on the site of occurrence, they can give rise to varying symptoms including lower abdominal pain, low back pain, vaginal bleeding, dyspareunia, frequency of micturation, dysuria, or other features of urinary obstruction. These tumors can be intramural or pedunculated and solid as well as cystic. Usually these tumors are single, benign, and slow growing but sarcomatous transformation has been reported.⁵

Diagnosis is usually difficult preoperatively as the condition mimics cystocele or cervical fibroid, but magnetic resonance imaging usually clinches the diagnosis. In magnetic resonance imaging, they appear as well-demarcated solid masses of low signal intensity in T1- and T2-weighted images, with homogenous contrast enhancement, while leiomyosarcomas and other vaginal malignancies show characteristic high T2 signal intensity with irregular and heterogeneous areas of necrosis or hemorrhage.^{6,7} However, histopathological confirmation is the gold standard of diagnosis and also beneficial to rule out any focus of malignancy. Surgical removal of the tumor through vaginal route, preferably with urethral catheterization to protect the urethra during surgery, is usually the treatment of choice as the approach is easy and there is availability of good surgical plane. When the tumour is large, an abdomino-perineal approach is preferred. In perimenopausal women treatment of choice is total abdominal hysterectomy. In large leiomyomas, if diagnosed preoperatively, GnRH analogues can be tried to reduce the size. The patient needs to be followed up for chance of recurrence. Our patient was symptom-free at 1 year follow-up. Though vaginal leiomyoma is rare, but its diagnosis should be kept in mind whenever examining a vaginal swelling.

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