



PRESENTATION OF VAGINAL LEIOMYOMA AS MASS PER VAGINUM- A RARE CASE REPORT

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Abstract : Vaginal leiomyomas are rare to exist as a primary tumor of vagina. Approximately 300 cases have been reported in world literature. They usually arise from anterior vaginal wall and are firm to hard in consistency with varied clinical presentations such as pain, pressure symptoms, dyspareunia and less commonly menorrhagia. Here, we report a case of vaginal leiomyoma presenting as mass descending per vaginum with menorrhagia and diagnosed postoperatively with the help of histopathological study.

Keyword : Vaginal leiomyomas, anterior vaginal wall, mass per vagina

HISTORY:

A 45-year-old multiparous woman presented to our outpatient department with complaints of menorrhagia for past 8 months. She gave history of mass descending per vaginum for the past 1 year, gradually increasing in size with no complaints of pain. She had no complaints of white discharge per vagina and urinary disturbances. She denied history of dyspareunia. She had regular menstrual cycles prior to 8 months with moderate flow lasting for three days and not associated with passage of clots. For the past 8 months she had regular cycles with episodes of heavy menstrual bleeding lasting for ten days associated with passage of clots with complaints of dysmenorrhea and had the last menstrual period 22 days back. She had three normal vaginal deliveries and tubal ligation done. She was a known case of Type 2 Diabetes mellitus and had uncontrolled blood sugars with oral hypoglycemic drugs.

EXAMINATION:

On clinical examination the patient was moderately built and nourished, anaemic and on abdominal examination no mass was palpable, tubectomy scar present. Examination of external genitalia was normal. The external urethral meatus appeared normal and there was descent of the anterior vaginal wall lying outside about 2cm from vulval outlet. (Figure.1) After reducing the anterior vaginal wall swelling, on speculum examination, the cervix could not be visualized. A mass about 6 x 4 cm, cystic firm in consistency, was palpated

in the anterior vaginal wall, about 2 cm below the external urethral meatus but the upper limit of the mass could not be delineated and was non tender on palpation. The cervix was felt high up and flushed with vagina. The exact size of uterus could not be made out on bimanual pelvic examination.



Figure.1-Anterior vaginal wall swelling

INVESTIGATIONS:

Transabdominal ultrasound revealed the uterus of size 10.5x6.5x3 cm, normal bilateral adnexa and a 7.5x5 cm hypoechoic mass anterior to cervix in the upper part of vagina and was suggested as pedunculated cervical fibroid extending into the vagina. The endometrial thickness was 12mm. The ultrasound study of the kidneys ureters and bladder was normal. Thereafter MRI was performed which revealed a well-defined lesion of size 8x4x4 cm homogenous mass probably arising from the cervix extending into lumen of vagina suggestive of cervical fibroid.

MANAGEMENT:

The urologist opinion was obtained as the mass was close to the urethra and the differential diagnosis of anterior vaginal wall cyst and cervical fibroid based on clinical findings and MRI findings. Examination under anaesthesia revealed descent of the anterior vaginal wall lying 3 cm from the vulval outlet, which was reducible. The mass of 8x6cm in size, cystic-firm in consistency felt in the anterior vaginal wall. After retracting the anterior vaginal wall, the cervix was high up and anterior lip of the cervix found to be flushed with mass and the cervical os seen and the endometrial sampling was taken. The uterus was enlarged to 10

weeks size. The patient's hemoglobin status improved with parenteral iron and her blood sugars controlled with insulin. She was posted for anterior vaginal wall cyst excision and proceeded with informed consent for excision of cyst and hysterectomy as the endometrium showed proliferative changes with cystically dilated glands.

PROCEDURE:

Under epidural anaesthesia, under strict aseptic precautions, patient in lithotomy, parts painted and draped, bladder catheterised. On examination there was descent of the anterior vaginal wall lying 3 cm from the vulval outlet. After reducing the swelling, on bimanual pelvic examination mass felt in the anterior vaginal wall and cervix found to be flushed with the mass, hitched up against the pubic symphysis and the uterus 10 weeks in size. A midline vertical incision made in the anterior vaginal wall after hydrodissection. The anterior vaginal wall flaps reflected and the mass was excised in toto (Figure.2). After the excision of mass the cervix was lying at level of introitus and hence vaginal hysterectomy was proceeded with anterior colporrhaphy. Specimen was sent for histopathological examination.



Figure.2-Excision of the vaginal mass

Gross morphology: Oval grey-white firm soft tissue mass, measuring 8x6 cm. Cut section showed well-circumscribed homogenous grey-white having whorled appearance.(Figure.3)



Figure.3-Gross specimen of the vaginal mass

HISTOPATHOLOGICAL EXAMINATION REPORT:

Sections from the mass shows numerous spindle cells arranged in sheets and interlacing fascicles with numerous blood vessels, scattered stroma and no mitotic figures features suggestive of Leiomyoma with few areas of cystic and hyaline degeneration. (Figure.4).

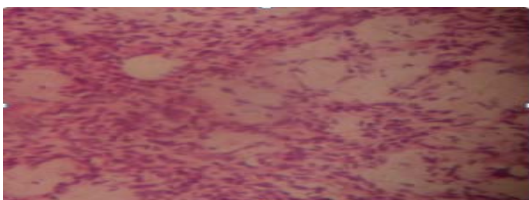


Figure.4--Histopathological image of leiomyoma

The uterus endometrial glands in proliferative phase with few cystically dilated glands, myometrium showed adenomyosis and cervix chronic non-specific cervicitis.

The post-operative period was uneventful and patient discharged on 10th post-operative day. Our patient was symptom free for a 1-year follow-up.

DISCUSSION:

Vaginal leiomyomas are very rare with approximately 300 cases reported in the world literature and the first case was detected in 1733 by Denys de Leyden. In the vagina, they commonly present along the anterior wall and next along the lateral wall. They may arise from the posterior wall and may present even after hysterectomy and also in the form of ischiorectal abscess. Very often it is difficult to diagnose them preoperatively. They may occur anywhere within the vagina and usually arise in the smooth muscle layer of the midline anterior vaginal wall. Its etiology is unknown, though some authors have speculated that it could be due to residual embryonic blood vessel tissues and smooth muscle fibers. Although rare, the most common mesenchymal neoplasm of the vagina is the leiomyoma. The mean patient age at detection of a vaginal leiomyoma, is approximately 40 years, with a reported range between 19 and 72 years. Vaginal leiomyomas vary from 0.5 to 15 cm in diameter, averaging approximately 3 cm in size, and may occur anywhere within the vagina, usually in a submucosal location. They usually occur as single, well-circumscribed mass arising from the midline anterior wall and less commonly, from the posterior and lateral walls. Although these rare lesions are often asymptomatic, larger tumors may be associated with pain, dystocia, dyspareunia, or obstructive urinary symptoms. Vaginal leiomyomas are estrogen dependent tumors. These tumors can grow rapidly during pregnancy and regress after menopause.

The tumors are usually moderately firm, but since they may undergo degenerative changes as that occur in the uterus, they may vary in consistency from firm to soft. Surgery through the vaginal approach has generally been recommended as the treatment of choice for these tumors. In this case, the diagnosis of anterior vaginal wall cyst was made preoperatively as the mass was cystic-firm in consistency and situated in anterior vagina. Histopathological confirmation is the gold standard of diagnosis and also beneficial to rule out any possible focus of malignancy. Surgical removal of the tumor through vaginal approach, preferably with urethral catheterization to protect the urethra during surgery, is usually the treatment of choice.

CONCLUSION:

Vaginal tumors are rare and include papilloma, hemangioma, and rarely leiomyoma. Vaginal leiomyomas can rarely present as mass per vagina and it should be kept in mind as a differential diagnosis of anterior vaginal wall swellings. The preoperative diagnosis of vaginal leiomyomas is difficult and can be diagnosed postoperatively with the help of histopathological examination.

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