

# CASE REPORT

## VAGINAL LEIOMYOMA: A CASE REPORT

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**ABSTRACT:** Vaginal tumours are rare and include papilloma, hemangioma, mucus polyp, and rarely leiomyoma. Vaginal leiomyomas remain an uncommon entity with only about 300 reported cases since the first detected case back in 1733 by Denys de Leyden. These tumors arise most commonly from the anterior vaginal wall causing varied clinical presentations. They may or may not be associated with leiomyomas elsewhere in the body. A case of a 30 year old nulliparous lady presented with a cauliflower like growth outside the introitus covering the external genitalia. It is a firm growth with a short pedicle arising from the anterior vaginal wall close to the urethral meatus. Biopsy from the growth revealed diffuse sheets of polymorphs, lymphocytes and congested capillaries. Excision of the growth was done and the histopathological examination revealed fibroleiomyoma. Leiomyomas are common benign tumors in the uterus. However, vaginal leiomyomas remain an uncommon entity. Vaginal leiomyomas may present with a variety of clinical features and may be mistaken preoperatively for cervical fibroid. Surgical removal of the tumor through vaginal approach, preferably with urethral catheterization to protect the urethra during surgery with subsequent histopathological examination is usually the treatment of choice.

**KEYWORDS:** Leiomyoma; Vaginal tumors; imaging; US; neoplasias.

**INTRODUCTION:** Leiomyomas are benign mesenchymal tumors representing the most common uterine neoplasms. Vaginal leiomyomas are uncommon. Like uterine leiomyomas, vaginal leiomyomas occur most frequently between the ages of 35 and 50 years.<sup>(1)</sup> Vaginal leiomyomas usually arise from the anterior vaginal wall, but are not always associated with leiomyomas arising from any other sites, such as the uterus, cervix, round ligament, ovary, inguinal canal, and vulva.<sup>(2)</sup> Depending on the size and location, vaginal leiomyomas may produce diverse clinical symptoms, such as dyspareunia, pain, or dysuria. Vaginal leiomyomas are frequently misdiagnosed and sarcomatous changes can occur; a histopathologic study confirm the correct diagnosis.<sup>(3)</sup> We present a case of a primary vaginal leiomyoma not associated with a uterine leiomyoma, arising from the anterior vaginal wall.

**CASE REPORT:** A 30 year old nulliparous woman belonging to low socio-economic status, a resident of S. Kota, (A nearby village) who is a house wife, came with a complaint of growth over the vulva of 4 months duration. The present complaint of growth over the vulval region was noticed by the patient four months ago as a small growth on the anterior part of the vaginal orifice which gradually increased and attained the present size covering the whole of the vulva. History of foul smelling mucoid discharge for two months and increased frequency of micturition are present. Gynaec history: Age of menarche-12 years. Menstrual history-3 to 5 days/28-30 days, normal flow, not associated with pain. Marital life-10 years. She had no children. Did not take any treatment for infertility.

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**Past history:** She is a known case of HIV diagnosed three years ago and was on ART since then.  
**General examination:** Moderately built, moderately nourished anemic. Breasts and spine normal. No thyromegaly. Vital data within normal limits.

**GYNAECOLOGICAL EXAMINATION:** P/A-soft. P/S-a 10\*10 cm cauliflower like necrotic growth present outside the vaginal introitus almost covering the vulva (Fig. 1). P/V-same mass felt arising from the anterior vaginal wall attached by means of short thick pedicle. Biopsy was taken from the growth after doing preliminary investigations. Report-section studied shows mostly necrotic material and inflammatory granulation tissue consisting of diffuse sheets of polymorphs, lymphocytes, proliferative capillaries with endothelial cell hyperplasia (Fig. 2). After giving a course of antibiotics, biopsy was repeated. Report-section studied shows inflammatory granulation tissue consisting of neutrophils, few eosinophils, lymphocytes and macrophages along with foci of congested blood vessels. Planned for excision biopsy. Done after investigating the patient. Sections revealed polypoidal tissue with surface necrosis, tumour is composed of spindle cells arranged in irregular fascicles having uniform nuclei. No giant cells, no significant mitotic figures. Imp: benign soft tissue tumour mass-FIBROLEIOMYOMA (Fig. 3).

**DISCUSSION:** Tumors of vagina are rare and there are only around 300 reported cases of vaginal leiomyomas since the first described case in 1733 by Denys de Leyden.<sup>[3]</sup> 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.<sup>[1]</sup> Occurrence in vagina is very rare. 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.<sup>[2]</sup> They usually occur as single, well-circumscribed mass arising from the midline anterior wall,<sup>[1,3]</sup> and less commonly, from the posterior and lateral walls.<sup>[4]</sup> They may arise even after hysterectomy.<sup>[5]</sup> 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.<sup>[6]</sup>

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.<sup>[6]</sup> Preoperatively, diagnosis by ultrasonography may be difficult, 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.<sup>[7]</sup> However, histopathological confirmation is the gold standard of diagnosis. Surgical removal of the tumor through vaginal approach, preferably with urethral catheterization to protect the urethra during surgery is usually the treatment of choice.

In case of large tumors, however, an abdomino-perineal approach is preferred.<sup>(8-10)</sup> The patient needs to be followed up for chance of recurrence. Our patient was symptom-free at 5-month follow-up. We present this case because of its rarity. She first reported to the department of Venereology and later referred to dermatology as she did not have any significant gynaecological symptoms.

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**CONCLUSION:** Leiomyomas are common benign tumors in the uterus. However, vaginal leiomyomas remain an uncommon entity. Vaginal leiomyomas may present with a variety of clinical features and may be mistaken preoperatively for cervical fibroid. Surgical removal of the tumor through vaginal approach, preferably with urethral catheterization to protect the urethra during surgery, with subsequent histopathological examination is usually the treatment of choice.

**Figure 1:** Cauliflower like growth arising from the vagina covering the vulva.



Fig. 1

**Figure 2:** Photomicrograph showing proliferating capillaries and stroma showing inflammatory cells (H&E 100X).

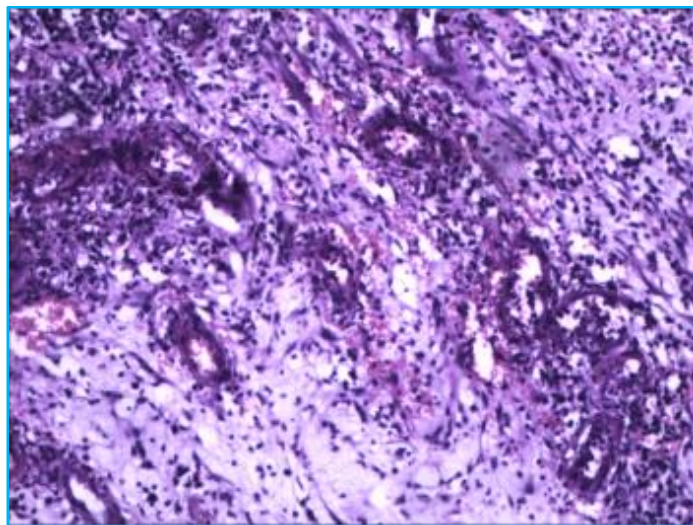
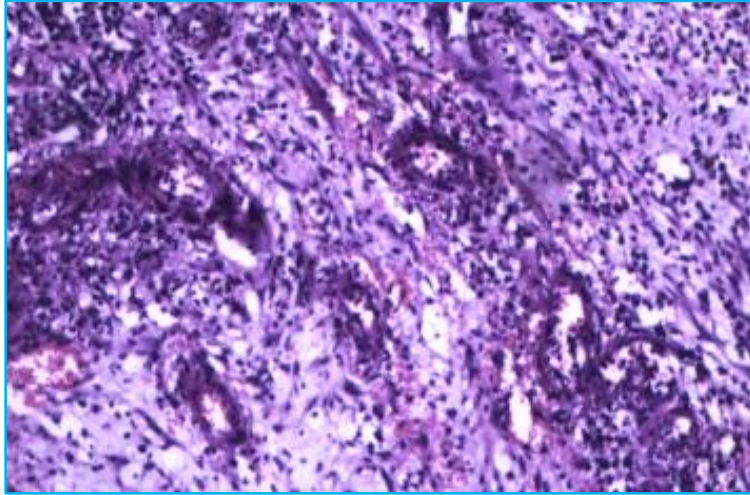


Fig. 2

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**Figure 3:** Photomicrograph showing branching fascicles of smooth muscle bundles ( H&E 100x).



**Fig. 3**

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