

DOI: <https://dx.doi.org/10.18203/2320-1770.ijrcog20241455>

## Case Report

# An unusual case of lateral vaginal wall leiomyoma: case report

Shashi L. Kabra\*, Renu Singh, Richa Madaan

Department of Obstetrics and Gynecology, DDUH, Delhi, India

**Received:** 05 April 2024

**Revised:** 07 May 2024

**Accepted:** 08 May 2024

### \*Correspondence:

Dr. Shashi L. Kabra,

E-mail: [drshashikabra@gmail.com](mailto:drshashikabra@gmail.com)

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## ABSTRACT

Twenty to thirty percent of women in the reproductive age group are affected with leiomyomas, the most frequent benign tumor of the uterus. Only 300 occurrences of vaginal leiomyomas have been documented, hence they are still a rare condition. Because of their low incidence and wide range of nonspecific clinical symptoms, tumors are assumed to originate from Mullerian smooth muscle cells in the sub-epithelium of the vagina. However, these cells can easily be misdiagnosed. Usually located in the anterior vaginal wall are vaginal leiomyomas. Here, we describe a case of left upper lateral vaginal wall leiomyoma in a 40-year-old multigravida. She presented with pelvic fullness. Cervical fibroid was diagnosed based on physical examination and MRI. Under anesthesia, the tumor was removed vaginally, and histology revealed a vaginal leiomyoma. Vaginal leiomyomas are uncommon tumors; however, they can present with a range of clinical symptoms and be mistakenly classified as cervical fibroid before surgery. The most effective therapy approach seems to be vaginal tumor excision followed by a histological investigation. To raise awareness of the disease and lower the possibility of a misdiagnosis and improper treatment, the current instance was disclosed.

**Keywords:** Cervical fibroid, Leiomyoma, Mullerian smooth muscle cells

## INTRODUCTION

First of all, hemangioma, mucus polyp, papilloma, and infrequently leiomyoma are examples of vaginal tumors. Vaginal leiomyomas are still an uncommon phenomenon, with only 300 cases documented.<sup>1</sup> They might or might not be connected to further leiomyomas within the body. We report a case of pelvic fullness due to a primary vaginal leiomyoma that sprang from the lateral wall.

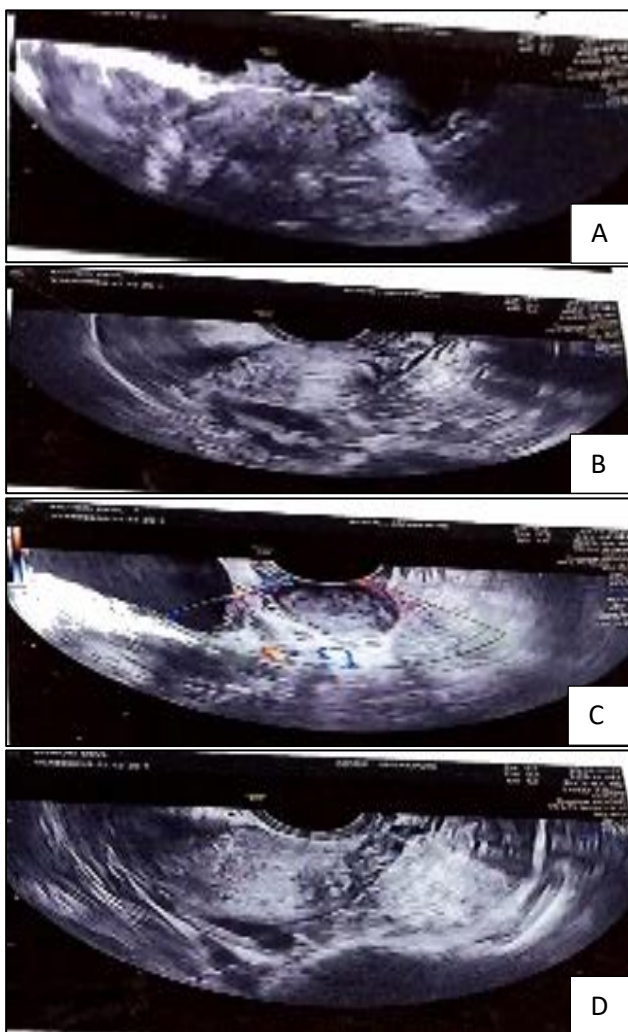
## CASE REPORT

A 40-year-old gravida 3 para 3 patient arrived at our outpatient department complaining of pelvic fullness, which she described as her uterus passing through her vagina. Her past menstrual cycle was typical. No prior history of related bladder or bowel issues exists. There is no history of the swelling being bigger when exerting

yourself or lifting big objects. Examinations, both general and other systemic, were normal. External genitalia were normal upon local examination. A nontender, hard mass measuring 3×2×3 centimeters that extended up to the left fornix was discovered during a pelvic exam. The mass was elevated and only felt and palpable following a vaginal examination. The size of the tumor was the same when the bladder was catheterized. The uterus was found to be normal in size, anteverted, nontender, mobile, and free of both fornices upon rectal examination. Blood biochemistry on investigations was largely normal. The uterus and ovaries were found to be of normal size on ultrasonography, with an endometrial thickness of 7 mm. A distinct 28×20 mm cystic lesion involving the left lateral wall was observed in the mid-upper third of the vagina. A 22 mm low signal exophytic lesion at the left lateral edge of the cervix was detected by magnetic resonance imaging. This lesion is most likely a sub-serosal fibroid of the cervix.



**Figure 1: Gross appearance of removed vaginal leiomyoma.**



**Figure 2 (A-D): MRI vaginal leiomyoma.**

The patient, a tailor, was ready for the bulk to be removed since she felt uneasy about it and wanted corrective surgery. Given saddle anesthesia. The lateral vaginal wall tumor, which reached the left lateral fornix, was confirmed by anesthetic examination. No signs of pelvic floor

prolapse were present. We attempted to use Allis forceps to secure the mucous membrane over the mass because the vaginal mucosa was slipping over it. To protect the urethra, an indwelling Foley's catheter was implanted. The area that was most noticeable had an incision. The vaginal mucosa was carefully detached from the tumor. A progressive dissection was performed using arterial forceps and scissors to separate the tumor from the surrounding tissue. In the end, the tumor was completely removed from the underlying tissue. An illustration showing 8 sutures using polyglactin 910 (Vicryl 1.0) on the bed. After being slightly clipped, the lateral vaginal mucosa was re-approximated with no 1 vicryl.

Hemostasis was achieved. A rectal examination verified there was no damage to the rectum. Postop phase went without incident. In a stable state, patient was sent home. A leiomyomatous polyp was discovered via histopathology. Following a month, follow-up consultation's clinical and sonographic examination revealed a healed vaginal wall free of any lumps or lesions. One month following the procedure, at postoperative visit, the lateral vaginal mucosa had a healed, unbroken suture line. Patient also said that her symptoms had improved.

## DISCUSSION

Leiomyomas in the female genital tract are common in the uterus. The next most common locations for leiomyomas in the female genital tract are the round ligament, uterosacral ligament, ovary, and inguinal canal.<sup>1</sup> Vaginal birth is incredibly rare. The most common age range for vaginal leiomyomas to be seen is between 35 and 50.<sup>2</sup> The front wall of the midline is usually where they emerge as a single, well-defined mass, with the posterior and lateral walls happening less commonly.<sup>1-4</sup> Endometriosis, malignant vaginal tumors, inclusion cysts, paraurethral cysts or abscesses, Gartner's duct cysts, and para-urethral and Bartholin cysts or abscesses are examples of differential diagnoses.<sup>5</sup> Depending on where they originate, they can cause a range of symptoms, including frequent urination, dysuria, vaginal bleeding, lower abdomen pain, low back pain, and other indicators of urinary blockage, even if they may not cause any symptoms at all. Magnetic resonance imaging usually makes a preoperative diagnosis; ultrasonography may not be able to. Histopathological confirmation, on the other hand, is the gold standard for diagnosis and helps rule out any possible malignant focus. Usually, surgical excision of the tumor through the vaginal approach is the chosen course of treatment; ideally, urethral catheterization is used to protect the urethra during the procedure. It is necessary to keep an eye out for any possible recurrences in a patient. At the two-month check-up, our patient showed no signs.

## CONCLUSION

Occurrence of leiomyoma in vagina is very rare, and its sarcomatous transformation is even rare but some cases

has been reported. Preop diagnosis is somewhat difficult and gold standard of diagnosis is histopathological confirmation. Surgical removal with urethral protection should be done and histopathologic diagnosis should be made to rule out any possibility of malignancy.

*Funding: No funding sources*

*Conflict of interest: None declared*

*Ethical approval: Not required*

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**Cite this article as:** Kabra SL, Singh R, Madaan R. An unusual case of lateral vaginal wall leiomyoma: case report. *Int J Reprod Contracept Obstet Gynecol* 2024;13:1596-8.