

A Rare Case of Anterior Vaginal Wall Leiomyoma

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About the Author



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Case Report

A 35-year-old female para 3 was presented to the outpatient department with complaints of something coming out per vaginum since 2 months. There was history of dyspareunia but no history of dysuria, increased frequency, or any feature of urinary retention. The patient complained that she noticed something appeared to come down her vagina for the last 2 months. A prevaginal examination revealed a mass in the vagina, which was about 3 cm below urethra (Figs. 1, 2). On per speculum examination, cervix was seen separately from mass (Fig. 3). An ultrasonography was performed which showed normal-sized

uterus, and bilateral adnexa was normal. There was no other abnormality on ultrasonography.

Her consent was taken for surgery as well as for photography and for publishing of the case. Her cystoscopy was done which was normal. There was no growth from the bladder. Both ureters were seen separately. The tumor was surgically removed by vaginal route (Figs. 4, 5). A Foley's catheter was introduced in the urethra for protecting the urethra. The tumor was enucleated by blunt dissection, but there was a vascular pedicle which was bleeding profusely. This pedicle needed ligation for profuse bleeding. The pedicle was apparently arising from the muscles of bladder wall (Fig. 5). Hence during the removal of the pedicle, there was accidental injury to bladder. There was a small rent in bladder wall from which dribbling of urine was seen. Further, this was confirmed by instilling methylene blue and saline in bladder retrograde through foley's catheter. The rent in bladder was sutured in two layers by no 2 vicryl: inner continuous interlocking layer and outer interrupted layer. Bladder injury could have been prevented by more careful dissection of the pedicle.

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Fig. 1 Mass from anterior vaginal wall



Fig. 2 The mass is 2–3 cm below urethra



Fig. 3 The mass is distinctly seen in anterior vaginal wall and is separate from cervix

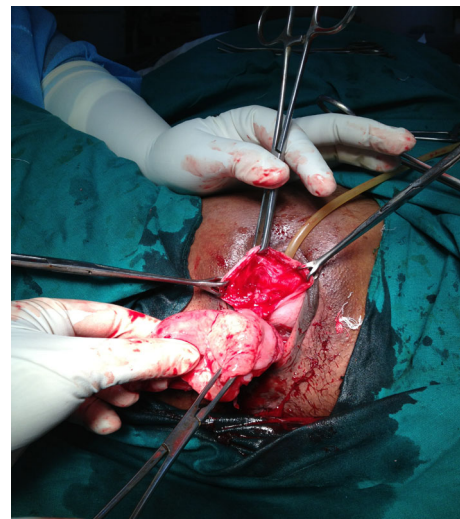


Fig. 4 Excision of leiomyoma from the bed

The tumor was then sent for histopathological examination with a preoperative diagnosis of vaginal leiomyoma. Gross examination revealed a 6×5 cm solid mass with a whorling appearance in the cut section. Microscopic examination revealed a well-circumscribed leiomyoma with degenerative changes underlying the squamous epithelium, consistent with the diagnosis of vaginal leiomyoma. Our patient was stable postoperatively. Her catheter was removed after 7 days, and she was discharged on 10th day.

Discussion

Vaginal tumors 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 [1]. Bennett and Erlich [2] found only nine cases in 50,000 surgical specimens and only one case in 15,000 autopsies reviewed at Johns Hopkins Hospital. 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 [1]. Occurrence in vagina is very rare. These tumors arise most commonly from the anterior vaginal wall causing varied clinical presentations. They may or may not



Fig. 5 Showing leiomyoma bed with *arrow* showing site of accidental bladder wall injury

be associated with leiomyomas elsewhere in the body. 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 [4]. 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 micturition, 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]. 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 [6, 7]. However, 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. In case of large tumors, however, an abdomino-perineal approach is preferred. The patient needs to be followed up for chance of recurrence. Our patient was symptom-free at 1-month follow-up.

Compliance with ethical requirements and Conflict of interest We have obtained written informed consent of patient for taking photograph as well as for publishing the case in journal. We have maintained the respect, confidentiality, and anonymity of our case. We have not caused any harm to our patient. Our case report is independent and impartial. We have ensured quality and integrity our case. The authors declare that there is no conflict of interest.

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