

# A Rare Case of Large Left Lateral Wall Vaginal Myoma

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## ABSTRACT

Vaginal leiomyomas are rare, they are uncommon benign tumor with variable clinical presentation. They usually present as a mass per vaginum or dyspareunia or pressure symptoms on the neighbouring structures. We present a case of 47 years lady with mass per vaginum and difficulty in walking and chronic pelvic pain. Her clinical findings suggested a large mass in the left vaginal wall, the mass was approximately 12 x 10 cm in size hindering the visualization of the cervix. Her ultrasonography showed bulky uterus with mass occupying the cervix. This finding was not correlating with the clinical findings. Magnetic resonance imaging (MRI) was done and it was reported as mass lesion in pelvis separate from the cervix abutting the rectum posteriorly. Ultrasonography (USG) guided biopsy was done which was reported as Leiomyoma. She underwent vaginal myomectomy and was confirmed in histopathology as Leiomyoma. A leiomyoma is a smooth muscle tumor that arises from the muscular part of the uterus and rarely seen in the vaginal wall.

## KEY WORDS

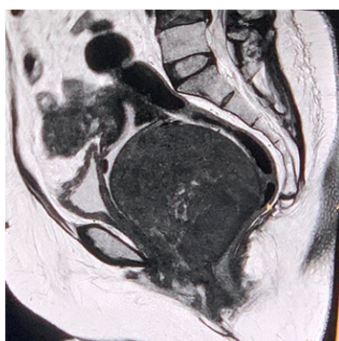
*Chronic pelvic pain, Leiomyoma, Mass per vaginum*

## INTRODUCTION

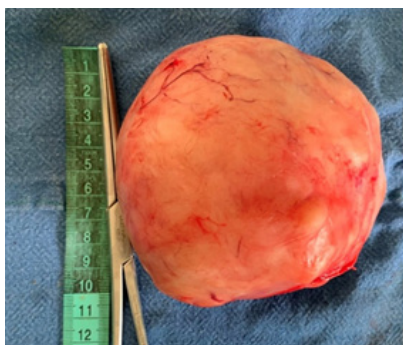
Leiomyoma of the vagina are rare and benign smooth muscle tumors. Vaginal leiomyoma is a rare entity and they may present with different clinical features mimicking pain abdomen, mass per vaginum, urinary obstruction, vaginal bleeding etc. These tumours mostly arise from anterior vaginal wall and less commonly from posterior and lateral wall.<sup>1,2</sup> Usually, smooth muscle tumors of the vagina present with a submucosal growth pattern or a pedunculated growth pattern from the anterior vaginal wall into vaginal cavity.<sup>3</sup> Preoperative determination of the primary organ is difficult when a vaginal tumor presents as growth into the pelvic area. Typically, for this condition a complete surgical resection is the treatment. In this case, MRI and USG guided trucut biopsy was performed for the determination of the primary organ and a diagnosis of benign or malignancy for informing the method of surgical treatment of the tumor.

## CASE REPORT

A 47 years lady presented with history of mass per vaginum for past 9 months to Gynecology Department. She had fullness in the vaginum, difficulty in walking and chronic pelvic pain. She complained of pain while sitting, squatting and lying down. She is P<sub>2</sub>L<sub>2</sub> lady, she had normal delivery 16 years back and had uneventful postpartum period. Her menstrual cycles were regular and normal in flow and character. She was a known case of hypertension on treatment and during her workup in the hospital, she was diagnosed to be diabetic and was started on antiglycemic agents. On clinical examination she was an obese lady with BMI of 29. Per abdominal examination was normal. Internal examination revealed a mass measuring 12 x 10 cm in the left lateral vaginal wall hindering the visualization of cervix. The size of the uterus could not be assessed on per vaginal as well as per rectal examination due to the large mass obscuring the access to the cervix and the uterus.



**Figure 1.** Contrast enhanced MRI showing a solid mass (12 × 10 cm) in the pelvic area.



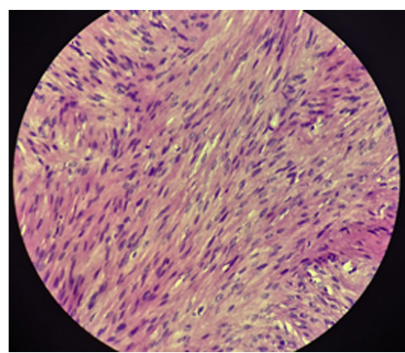
**Figure 2.** Gross specimen of vaginal myoma.



**Figure 3.** Cut specimen of vaginal myoma showing whorled appearance.



**Figure 4.** Visualization of cervix after removal of the vaginal mass.



**Figure 5.** Histopathology showing spindle shaped cells without necrosis suggestive of benign vaginal myoma.

USG and transvaginal physical examination combined with a bimanual rectal exam revealed a solid firm mass of approximately 12 × 10 cm between the left lateral wall and posterior wall of vagina and anterior wall of the rectum with no obvious limits. Laboratory findings revealed that lactate dehydrogenase, CA-125, carcinoembryonic antigen (CEA), and CA19-9 were within normal limits. Radiological analysis with contrast enhanced MRI (fig. 1) revealed a solid mass (12 × 10 cm) in the pelvic area. The mass did not extend from the uterus corpus, but the findings were insufficient to determine its origin. Sigmoidoscopy showed a mass pressing the anterior wall of the rectum with no mucosal abnormalities. An ultrasound-guided transvaginal needle biopsy was performed. Microscopically, the tumor showed spindle-cell growth without necrosis. Nuclear pleomorphism was mild, and no mitotic activity was detected. We performed vaginal myomectomy (fig. 2 and fig. 3) it was removed in toto and the excess vaginal mucosa was excised and was sutured obliterating the dead space. The cut section view showed whorled appearance. (fig. 4). After the removal of the mass, cervix was visualized (fig. 5) and it was healthy appearing cervix and uterus was anteverted and there was no forniceal mass. Per rectal examination was performed and the mucosa appeared normal. Patient came for follow up after 4 weeks and was comfortable with no complaints. Histopathology was reported as benign vaginal leiomyoma (fig. 6).

## DISCUSSION

Leiomyomas are common gynecological tumors of smooth muscle origin, most of the smooth muscle tumors of the gynecological organ that have been reported were in the uterus. Vaginal smooth muscle tumors are rare. Smooth muscle tumors of the vagina are usually located in the anterior wall and rarely in the lateral wall and fornix.<sup>4-6</sup> Usually, smooth muscle tumors of the vagina form well-delineated submucosal anterior vaginal wall masses or are vaginally pedunculated.<sup>4</sup> In the present rare case, a large vaginal tumor presented from the left lateral vaginal wall, occupying the pelvic cavity; thus, the preoperative determination of the primary organ was difficult. Radiologic (CT or MRI) analysis is mandatory to evaluate a vaginal mass and its relationship to adjacent structures.<sup>7,8</sup> Although radiological analysis is important, no test provides sufficient sensitivity or specificity to conclusively rule out malignancy, as this determination must be performed based on a histopathological examination.<sup>9</sup> The radiological findings (CT and MRI) of the present case were insufficient to determine the tumor origin. Determination of the primary organ and a benign or malignant diagnosis are desirable to inform the choice of the surgical approach. In our case, the pathological findings were based on an ultrasound-guided transvaginal needle biopsy, which can be safely performed. Surgical removal is the treatment of choice. Vaginal approach is usually feasible but at times abdominoperineal

approach may be required to complete the excision in large tumours.<sup>10</sup>

Vaginal leiomyoma is a rare tumor. It presents with various clinical features mimicking chronic pain abdomen, mass per vaginum, urinary obstruction, vaginal bleeding etc. These

tumours mostly arise from anterior vaginal wall and less commonly from lateral and posterior vaginal wall. Surgical resection is the treatment of choice, recurrence may occur and it has to be informed to the patient.

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