

# VAGINAL LEIOMYOMA PRESENTING AS DYSFUNCTIONAL UTERINE BLEEDING

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Leiomyoma (fibroid) is the most common pelvic tumor. It is present in 20% of women of reproductive age, and its incidence increases with age. Fibroids are usually uterine in origin, and only rarely are they ectopic. They may arise from the round ligament, utero-ovarian ligament, uterosacral ligament, the vagina, or the vulva. In 1–4% of cases, the myoma grows primarily in the cervix. Primary vaginal fibroids are even rarer. We report a case of vaginal fibroid, which was diagnosed as cervical fibroid (or broad ligament fibroid) before surgery.

A 35-year-old, para 3, woman presented with acute onset of vaginal bleeding for 2 days, with no associated pain or tenderness. On enquiry, she revealed that this bleeding had been on and off for the previous 3 months. In the past, she had three normal, uneventful vaginal deliveries; the last delivery was 7 years before. She had tubal ligation done previously. She had no relevant family or past history.

On abdominal examination, there were no palpable lumps. Speculum examination showed a swelling of about 5 × 5 cm on the right vaginal wall; mucosa over the swelling appeared to be healthy. Vaginal examination showed a backward cervix, uterus anteverted and ante-flexed, normal in size, with a firm mass of about 5 × 5 cm felt in right lateral fornix of the vagina. The swelling was not mobile and non-tender. Upper margin of the swelling could not be reached. It could be felt separately from uterus and appeared to be arising from broad ligament or subserosally so it was provisionally diagnosed as broad ligament fibroid or subserosal fibroid.

Routine hemogram, coagulogram and biochemical profile were normal. Sonography showed a well-defined lesion of 5.2 × 5.7 cm in the right cervical region, likely to

be a subserosal or broad ligament fibroid. Endometrial thickness was 6.2 mm. Both ovaries were separately visualized. Liver, gall bladder, spleen, kidneys and urinary bladder were normal.

The patient was kept for total abdominal hysterectomy (TAH). Abdomen was opened by Pfannenstiel incision. Uterus was normal in size; both adnexa were healthy. A 5 × 5-cm mass was felt that did not arise from the uterus or cervix; it appeared to be from the vaginal swelling. On palpation, it was a well-defined, rounded, firm, non-mobile mass arising from the right lateral fornix of vagina with smooth surface, non-adherent to the vaginal mucosa.

Because the patient had presented with dysfunctional uterine bleeding, and did not plan on having any more children, the planned TAH was performed. After removing the uterus, the vaginal swelling was approached through the vault. Incision was made on the most prominent part of the swelling and the mass was dissected away from all the surrounding tissue. It could be easily separated digitally. The cavity was closed with hemostatic sutures. The removed mass was excised; it showed a typical whorled pattern suggestive of vaginal leiomyoma. It was sent for histopathology. The vault was closed with continuous sutures. Blood loss was minimal. There were no intraoperative complications and her postoperative period was uneventful. Stitches were removed on the eighth postoperative day. She was discharged on the ninth day in good condition. Histopathological examination of the removed mass proved it to be leiomyoma.

Fibroids are universally uterine in origin. Only very rarely are ectopic fibroids discovered. The most common site of such a presentation is the vagina [1]. The earliest reference made to such a tumor is attributed to Denys De Leyden in 1773, and the first review of the literature concerning such a tumor was published in 1882. It is estimated that around 300 vaginal fibroids have been reported in the literature [2]. Bennet and Erlich



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found only nine cases in 50,000 surgical specimens and 15,000 autopsies reviewed at John Hopkins Hospital [3].

The mean patient age at which vaginal leiomyomas are detected is approximately 40 years (reported range, 19–72 years). They vary from 0.5 to 15 cm in diameter, averaging 3 cm in size and may occur anywhere within the vagina, usually in submucosal layer [4].

Most of these tumors are asymptomatic. These usually present as solid single nodules, mostly from anterior walls mimicking cervical fibroid [5]. They may present as uterovaginal prolapse. In such cases, it is essential to try to identify the anatomy of displaced mass. Vaginal and rectal examination should be done during preoperative assessment to differentiate prolapse from cervical or uterine polyps, and from vaginal lesions whether benign or malignant in nature [1]. Apart from these common presentations, some unusual presentations include prolapse with urinary urgency [6], gluteal swelling with pus discharging vaginally [7], menometrorrhagia [8], urethral diverticulum [9], cystocele [10] or severe hemorrhage [11]. Preoperative imaging may help to rule out malignancy [12].

Pathologically, they are firm, well-circumscribed and homogenous, and resemble uterine fibroid [5]. Treatment is always surgical, although preoperative embolization has been reported [11]. The route of surgery is either by upper or lower route depending on the tumor's location. Local recurrences have been reported. These tumors are estrogen-dependent and regress after menopause [5]. Whenever such a tumor is detected, it has to be removed immediately to prevent further growth and sarcomatous change [13], although the incidence of such a change is extremely less [14].

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