

DOI: <https://dx.doi.org/10.18203/2320-1770.ijrcog20261477>

## Case Report

# Giant cervical leiomyoma presenting as severe abnormal uterine bleeding and symptomatic anaemia in a perimenopausal woman: a case report

Hudania Addina\*, Nastiti Hemas Mayangsari, Ninda Frymonalitza, Munawar Adhar Lubis

Department of Obstetrics and Gynecology, The Faculty of Medicine Riau University, Arifin Achmad General Hospital, Pekanbaru, Indonesia

**Received:** 21 April 2026

**Accepted:** 13 May 2026

**\*Correspondence:**

Dr. Hudania Addina,

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

**Copyright:** © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

### ABSTRACT

Cervical leiomyoma is a rare benign smooth muscle tumor arising from the uterine cervix, accounting for less than 5% of all uterine fibroids. Large cervical myomas may cause abnormal uterine bleeding, pelvic pressure symptoms, urinary complaints, and operative difficulties due to distortion of adjacent pelvic anatomy. A 52-year-old multiparous woman was referred with recurrent heavy vaginal bleeding for three months, worsening over the preceding ten days with passage of blood clots. She developed symptomatic anemia requiring blood transfusion. Pelvic examination revealed a large smooth mass occupying the vaginal canal arising from the cervix. Ultrasonography demonstrated a well-defined cervical mass measuring 9.12×7.38×8.11 cm. The patient underwent total abdominal hysterectomy with bilateral salpingo-oophorectomy. Giant cervical leiomyoma should be considered in women presenting with severe abnormal uterine bleeding and a cervical mass. Proper diagnosis and definitive surgical management are essential for favorable outcomes.

**Keywords:** Cervical leiomyoma Cervical myoma, Abnormal uterine bleeding, Hysterectomy, Anaemia

### INTRODUCTION

Leiomyoma is the most common benign gynecologic tumor in women of reproductive age. However, cervical leiomyomas are uncommon and represent only 0.6–5% of all uterine fibroids. Unlike uterine corpus fibroids, cervical myomas frequently pose diagnostic and surgical challenges because of their proximity to the bladder, ureters, rectum, and uterine vessels.<sup>1,2</sup>

Depending on size and location, patients may present with abnormal uterine bleeding, pelvic pain, urinary symptoms, constipation, infertility, or dyspareunia. Large cervical leiomyomas are clinically significant because they may mimic cervical malignancy and distort pelvic anatomy, thereby increasing operative complexity. We report a case of giant cervical leiomyoma in a perimenopausal woman presenting with severe abnormal uterine bleeding and

symptomatic anemia successfully treated with definitive surgery.<sup>3</sup>

### CASE REPORT

A 52-year-old woman, gravida 4 para 3 abortus 1, was referred from a secondary hospital with heavy vaginal bleeding for ten days. She had experienced recurrent episodes of excessive bleeding during the preceding three months. The bleeding was bright red with clots, requiring pad changes 8–9 times daily.

The patient complained of weakness and nausea but denied abdominal pain, urinary symptoms, bowel complaints, postcoital bleeding, dyspareunia, or weight loss. Prior laboratory examination showed severe anemia, and one unit of packed red blood cells had been transfused before referral.

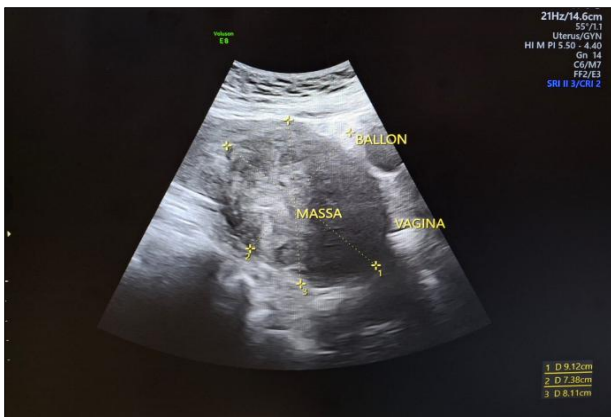
On admission, the patient was hemodynamically stable. Abdominal examination was unremarkable without palpable mass or tenderness.

Gynecological examination demonstrated blood clots at the vulva. Speculum examination revealed a large smooth-surfaced mass occupying the vaginal lumen and arising from the cervix. Contact bleeding was absent, and the portio was not clearly visualized.

Bimanual examination revealed an anteverted uterus of approximately normal size. A round, firm cervical mass approximately the size of an adult fist was palpated. The mass had a smooth surface and well-defined margins. Bilateral adnexa were unremarkable, the parametrium was soft and free, and uterine mobility was preserved.

Pelvic ultrasonography demonstrated anteverted uterus measuring 6.39×3.97×5.78 cm, endometrial thickness 3.82 mm, well-defined hypoechoic cervical mass measuring 9.12×7.38×8.11 cm, pseudocapsule present, peripheral vascularity noted, ovaries difficult to visualize, chest radiography was within normal limits.

Transabdominal ultrasonography showing a well-defined hypoechoic mass in the cervical region measuring 9.12×7.38×8.11 cm, with pseudocapsule formation and peripheral vascularity (“ring of fire” appearance), consistent with cervical leiomyoma (Figure 1).



**Figure 1: Transabdominal ultrasonography.**

The working diagnosis was abnormal uterine bleeding due to giant cervical leiomyoma with symptomatic anemia. Preoperative optimization included intravenous fluids, antifibrinolytic therapy, and blood transfusion preparation.

Given the patient’s age, completed parity, recurrent bleeding, and tumor size, total abdominal hysterectomy with bilateral salpingo-oophorectomy was performed successfully. Postoperative recovery was uneventful with complete cessation of vaginal bleeding.

Gross specimen after total abdominal hysterectomy demonstrating a giant cervical leiomyoma attached to the

uterus. The tumor appears well-circumscribed, smooth-surfaced, and firm, measuring approximately 9 cm in greatest diameter (Figure 2).



**Figure 2: Gross specimen after total abdominal hysterectomy.**

## DISCUSSION

Cervical leiomyomas are substantially less common than uterine body fibroids and account for a small proportion of all leiomyomas. They may arise from the anterior, posterior, lateral, or central cervix. Large central lesions can elevate the uterine corpus and significantly distort normal pelvic anatomy.<sup>1,3</sup>

Clinical manifestations depend on size and direction of growth. Common symptoms include abnormal uterine bleeding, pelvic pressure, urinary retention, constipation, dyspareunia, and infertility. In the present case, severe recurrent bleeding resulted in symptomatic anemia requiring transfusion, which justified urgent definitive treatment.<sup>4,5</sup>

Differential diagnosis includes cervical carcinoma, prolapsed submucosal fibroid, cervical polyp, and less commonly leiomyosarcoma. Distinguishing cervical myoma from malignancy is critical. In this patient, the smooth surface, absence of friability, mobile uterus, and preserved parametria favored a benign lesion.<sup>6</sup>

Ultrasonography is usually the first-line imaging modality and commonly demonstrates a solid, well-circumscribed hypoechoic lesion. MRI may provide superior delineation of ureteric displacement and adjacent organ involvement when available. Management depends on patient age, symptoms, fertility desire, and tumor size. Myomectomy may be offered to women wishing to preserve fertility. However, hysterectomy remains the definitive management in perimenopausal women with completed parity and large symptomatic tumors.<sup>7</sup>

Surgery for cervical myoma can be technically demanding because the bladder and ureters may be displaced from their usual anatomical positions. Careful dissection and

ureteric identification are essential to minimize complications. The strength of this report lies in demonstrating a rare giant cervical leiomyoma presenting primarily with life-impacting hemorrhage. Its limitation is the absence of histopathological details and advanced imaging correlation.<sup>8,9</sup>

## CONCLUSION

Giant cervical leiomyoma is a rare but important cause of severe abnormal uterine bleeding and anemia in perimenopausal women. Because it may clinically mimic cervical malignancy and complicate pelvic surgery, accurate diagnosis and careful operative planning are essential. Total abdominal hysterectomy remains an effective definitive treatment for women with completed parity.

*Funding: No funding sources*

*Conflict of interest: None declared*

*Ethical approval: Not required*

## REFERENCES

1. Alam NA, Bevan S, Churchman M, Barclay E, Barker K, Jaeger EE, et al. Localization of a gene (MCUL1) for multiple cutaneous leiomyomata and uterine fibroids to chromosome 1q42.3-q43. *Am J Hum Genet.* 2001;68(5):1264-9.
2. Anania C. Expression of the fibroblast growth factor receptor in women with leiomyomas and abnormal uterine bleeding. *Mol Hum Reprod.* 2017;3:685-91.
3. Steve H. Factors in fibroid growth. *Baillieres Clin Obstet Gynaecol.* 2008;12:225-43.
4. Barbieri RL, McShane PM, Ryan KJ. Constituents of cigarette smoke inhibit human granulosa cell aromatase. *Fertil Steril.* 2011;46:232-6.
5. Baron JA, La Vecchia C, Levi F. The antiestrogenic effect of cigarette smoking in women. *Am J Obstet Gynecol* 2014;162:502-14.
6. Brandon DD, Erickson TE, Keenan EJ. Estrogen receptor gene expression in human uterine leiomyomata. *J Clin Endocrinol Metab.* 2015;80:1876-81.
7. Buttram VC. Uterine leiomyoma: aetiology, symptomatology and management. *Prog Clin Biol Res.* 2009;225:275-96.
8. Cecil HC, Joel B, Harris SJ. Uterine Fibroid. *J Agric Food Chem.* 2010;19:61-5.
9. Flake GP, Andersen J, Dixon D. Etiology and pathogenesis of uterine leiomyomas: a review. *Environ Health Perspect.* 2013;111:1037-54.

**Cite this article as:** Addina H, Mayangsari NH, Frymonalitza N, Lubis MA. Giant cervical leiomyoma presenting as severe abnormal uterine bleeding and symptomatic anaemia in a perimenopausal woman: a case report. *Int J Reprod Contracept Obstet Gynecol* 2026;15:xxx-xx.