

Vaginal myomectomy of a prolapsed gangrenous cervical leiomyoma

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Abstract

We report a challenging case of a huge gangrenous prolapsed cervical leiomyoma in a multiparous HIV positive lady. A 37-year-old para 3 lady presented with a progressively increasing irreducible mass protruding out per vaginam, 3 months duration of heavy menses, and symptoms of a urinary tract infection. We performed a vaginal myomectomy and she did well postoperatively.

A prolapsed gangrenous cervical leiomyoma is a rare condition with only a few cases reported in the literature. Vaginal myomectomy for this condition can be performed in experienced hands without difficulties.

Key words: Necrosis, prolapsed cervical leiomyoma, vaginal myomectomy.

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Introduction

Uterine leiomyomas are the most common tumor of the reproductive tract in women of reproductive age and account for one-third of all cases of gynecological admissions.^[1,2] Often asymptomatic, uterine leiomyomas may cause debilitating symptoms in many women, such as abnormal uterine bleeding, abdominal pain, urinary frequency, constipation, pregnancy loss, dyspareunia, and in some cases infertility.^[1,2] Their growth is dependent on oestrogen production.^[1] They may originate from the cervix or pass through the cervical canal while still attached within the body of the uterus by a long stalk.^[1,2] When this occurs, they may prolapse out of the introitus^[3-5] and become necrotic,^[4] as was seen in the present case.

Case Report

Mrs IF, a 37-year-old para 3 with three living children, presented to the accident and emergency unit of the teaching hospital with a 2-hour history of a progressively increasing mass protruding from the vagina and a day history of lower abdominal pain and vaginal bleeding. She noticed the vaginal mass some months prior to presentation, occasionally

protruding to the introitus, receding spontaneously or requiring manual replacement. The protrusion was aggravated by bending down and squatting. A day prior to presentation, the mass protruded beyond the introitus and was irreducible. There was associated menorrhagia, lower abdominal pain, urinary urgency, frequency, straining, and difficult micturition. Two years prior to presentation, she was seen in our gynecology clinic and noted to have recurrent uterine leiomyoma and a large cervical leiomyoma. She was scheduled for surgery but lost to follow-up. She had an abdominal myomectomy 6 years earlier at a private hospital and received four units of blood. She had no other previous history of surgery.

She was diagnosed of HIV 4 years prior to presentation and has been on highly active antiretroviral therapy (HAART) since diagnosis.

Examination revealed a young lady in painful distress, febrile, anicteric, and pale. There was no pedal edema and no peripheral lymphadenopathy. The temperature

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was 39.1°C. The pulse rate was 106 beats per minute, full volume and regular. The blood pressure was 140/90 mmHg. The heart sounds I and II were heard and there were no murmurs. The respiratory rate was 22 cycles per minute. The chest was clinically clear.

The abdomen showed a subumbilical midline scar. There was no area of tenderness and the uterus was enlarged to 16 weeks gestation. Vaginal examination revealed a large mass that protruded from the vagina (24 × 15) cm, firm in consistency, malodorous, and the distal end appeared necrotic. The stalk was wide and an attempt to locate the cervix was not possible [Figure 1]. We suspected a gangrenous prolapsed leiomyoma and she was admitted to the ward to ensure that this was not chronic uterine inversion or uterine carcinoma, to begin antibiotics, draw requisite labs and image the pelvis.

The packed cell volume was 19% and she was subsequently transfused with 3 units of blood. The urinalysis and renal function test were normal. The abdomino-pelvic scan showed the uterus with large posterior intramural leiomyoma that measured 97 × 81 mm and occupied the pouch of Douglas with features suggestive of degeneration. The endometrial cavity was visible while the lower and mid-cervixes were not visible. The urinary bladder was drawn up over the uterus. The liver showed no abnormality. There was bilateral moderate hydronephrosis.

She was begun on intravenous fluids and broad-spectrum antibiotics and we placed an indwelling catheter without difficulty. We planned to do a vaginal myomectomy and she was counseled on the findings and she gave consent. This was to take care of the gangrenous mass and limit the procedure to the vagina.

She underwent vaginal myomectomy under general anesthesia on the 3rd day of admission. The intraoperative findings included a prolapsed gangrenous appearing

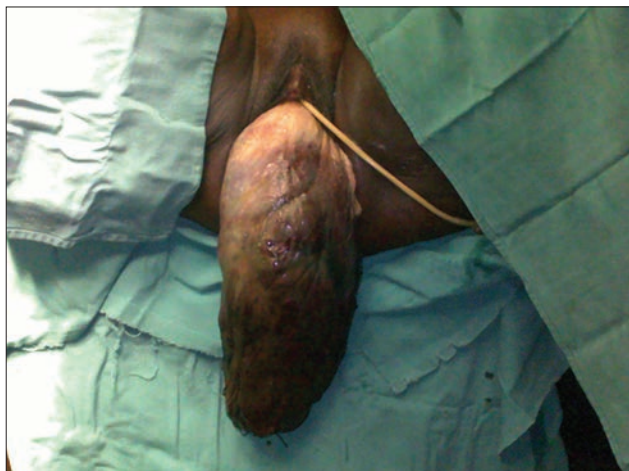


Figure 1: A huge gangrenous prolapsed fibroid Polyp

leiomyoma that weighed 3.25 kg, and hypertrophied cervix. The prolapsed leiomyoma was removed in one piece with monopolar diathermy to minimize bleeding. Subsequently, the thick stalk, diameter of 5 cm, was held with two lanes forceps, ligated close to the base (originating from the cervical canal) with vicryl 2 and excised until the rim of the cervix was reached. The estimated blood loss was 100 ml. Her postoperative recovery was satisfactory. She was discharged on postoperative day 8. This long stay was due to her adherence counseling, further evaluation and treatment by the HIV physicians.

On the 2-week follow-up examination, the anterior and posterior lips of the cervix were uninfected, healing well, and begun to resemble a normal appearing cervix. The histo-pathological report is as follows;

Macroscopy

“Specimen consists of grotesque, dark brown, fibro collagenous tissue weighing 3 kg and measuring 22.4 × 20.5 × 11.5 cm with a peduncle measuring 3 cm. The cut section shows poorly fixed bark red surface.”

Microscopy

Histologic section of tissue show bundles of proliferating mature smooth muscle fibers running in different angles with some blood vessels interspersed. The extensive area of hyalinization, edema, and necrosis are seen.”

Diagnosis

“The finding is in keeping with prolapsed leiomyoma with evidence of necrosis.”

Discussion

Uterine leiomyomas are the most common tumor of the reproductive tract in women of reproductive age.^[1,2] Cervical leiomyoma constitute 1-2 % of the total leiomyoma cases and are rare.^[1] There are three types of cervical leiomyoma namely; interstitial, supravaginal, and polypoidal. Of these types, the polypoidal is rare^[1] and was seen in the case reported. When a leiomyoma is in the cervix, it can change the shape of the cervix and cause it to lengthen. This was observed in Mrs IF. If the leiomyoma gets bigger, it could actually cause the uterus to push upward and or cause the bladder to be drawn up and predispose it to urinary tract infection.

In the reported case, the patient was in acutely ill-looking state with complaints of mass protruding per vaginam, menorrhagia, and features suggestive of urinary tract infection which were due to pressure symptoms caused by the tumor. It was a technically challenging situation as the patient was HIV positive, multiparous with both an infected gangrenous cervical and intramural leiomyomas and a previous uterine surgery. She had a strong desire to

preserve her reproductive function. She was covered with broad-spectrum antibiotics and vaginal myomectomy was performed.

Vaginal myomectomy had to be resorted in this case for removal of the cervical leiomyoma. This was a quick and safe procedure with reduced operating time and anesthetic exposure in this ill-septic patient than abdominal myomectomy. The intramural leiomyoma will subsequently be removed when patient is fit and if symptomatic.

However, since Atlee performed the first vaginal polypectomy, the procedure has been developed and modified by many gynecologists.^[6] Essentially an open abdominal myomectomy technique could have been performed, but this was not done because the leiomyoma was already outside the vulva and the patient was not fit for an extensive long surgery. In a similar study that involved the management of 35 women who had vaginal myomectomy, 8.6% of the patients required laparotomy and 11.4% developed pelvic haematomas.^[7] Most authors have reported on the safety of vaginal myomectomy and also regard it as the initial treatment of choice for prolapsed pedunculated submucous myoma, except in those cases in which other indications necessitate an abdominal approach.^[3-5]

Conclusion

Vaginal myomectomy is the treatment of choice for prolapsed polypoidal cervical leiomyoma. The associated morbidity is

minimal.^[5] In this case of huge prolapsed leiomyoma it is imperative to have a thorough preoperative evaluation, anticipate operative challenges, and strike a judicious and rational approach about deciding the route of myomectomy.

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