

Giant prolapsed submucous leiomyoma: a surgical challenge for gynecologists

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Summary

We present a case of a 45-year-old woman who presented with irregular vaginal bleeding and menorrhagia for two months, with an episode of massive bleeding initiating 24 hours before with hemodynamic shock. Vaginal inspection showed a soft, rounded, friable mass in vaginal introitus. After hospitalization, blood transfusion and hydration, she was submitted to vaginal myomectomy with the withdrawal of a 12-cm white, solid, huge, pedunculated, leiomyoma; however, hysterectomy was performed due to persistent uterine bleeding. The postoperation period had no complications. Macroscopy showed a retraction of the myoma pedicle. Gynecologists should prioritize clamping of a pedicle before surgery, reducing its size if the tumor is large.

Key words: Uterine leiomyoma; Vaginal myomectomy; Vaginal bleeding; Hysterectomy.

Introduction

Although uterine leiomyomas are the most common benign tumors in gynecology, 2.5% are pedunculated and originate from the submucous layer [1, 2]. Eventually they can protrude through the cervical canal and into the vagina; this subgroup of prolapsed pedunculated submucous leiomyomas represents a distinct entity from the managing point of view. Standard treatment is vaginal myomectomy according to the literature. However, it is important during surgery to locate any pedicles in order to stop any bleeding of these tumors [3]. We present a case of a huge prolapsed leiomyoma where it was not possible to visualize the implantation pedicle, and after vaginal myomectomy, a hysterectomy was performed.

Case Report

A 45-year-old woman, G4/P4/A0/C0, presented at our Urogynecology Service with irregular vaginal bleeding and menorrhagia of two months duration, with an episode of massive bleeding which had initiated 24 hours before. She also referred dizziness, pain in the lower limbs, asthenia and headache. She did not have any urinary or bowel problems. Physical exam showed a regular state with arterial hypotension (BP 70 x 40 mmHg), tachycardia (140 bpm), and pale mucosa, conferring hemodynamic shock. The gynecological exam showed a soft, rounded, friable but non-tender mass in the vaginal introitus (Figure 1), with a large blood loss. Laboratory exams revealed: Hgb 5.0 g/dl, Hct 18.0, platelets 180.000, and normal electrolytes. Transvaginal ultrasound (US) revealed a 15.9 x 9.9 x 8.3 hypoechoic mass pushing the uterus for the left position. Initial histopathological sampling from the vaginal mass showed fibroblastic tissue with fusiform cells and no atypia. After hospitalization, the patient was submitted to blood transfusion and intravenous hydration, and the initial symptoms ceased after that. Four days later, after she stabilized clinically,

a vaginal myomectomy (Figure 2) with the withdrawal of a 12.8 x 10 x 8 cm, white, solid, giant, pedunculated and firm leiomyoma was executed. During myomectomy, it was not possible to directly visualize the pedicle due to the large size of the tumor. Initially, morcellation was attempted but it was a very vascularized tumor, thus it was decided to remove it entirely. However, bleeding persisted after surgery, with another episode of hemodynamic instability so it was decided to continue surgery with vaginal hysterectomy (Figure 3). The postoperation period had no complications. Paraffin histological sampling confirmed benign leiomyoma.

Discussion

The vaginal approach for removal of a prolapsed submucous leiomyoma began in 1845, when the first successful vaginal myomectomy for this surgery was performed [3]. Twisting, ligation and excision, and morcellation of larger tumors have been used. Kanaoka *et al.* [4] utilized hysteroscopically assisted techniques to withdraw these tumors, as a variation of the procedure. Usually, the mean diameter of these prolapsed tumors varies from 3-5 cm in 30% of cases [2]. Underestimating the total size of a leiomyoma is a step that should be cautioned with imaging methods, such as pelvic US and magnetic resonance imaging. Usta *et al.* [2] probably removed the longest prolapsed leiomyoma ever described (76 cm) with the aid of US. However, the overall predictive value of US is unsatisfactory.

Nonetheless, what it mostly emphasizes is identification of the vascular pedicle and its ligation so bleeding can be stopped and vaginal hysterectomy avoided. This is not a problem for small and medium leiomyomas, but larger sizes are a challenge for vaginal surgeons, who have to utilize techniques for their reduction and, finally, ultimately their extraction. In a series of 44 vaginal myomectomies, Golan *et al.* [5] had an efficacy of 95.6% in cases; two patients were promptly submitted to abdom-

Revised manuscript accepted for publication January 7, 2011



Fig. 1

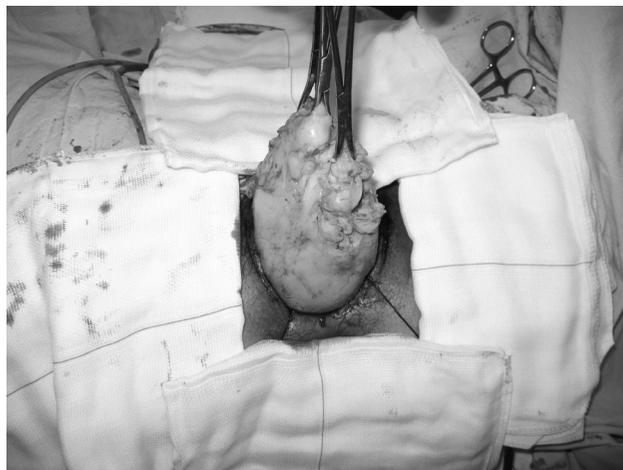


Fig. 2

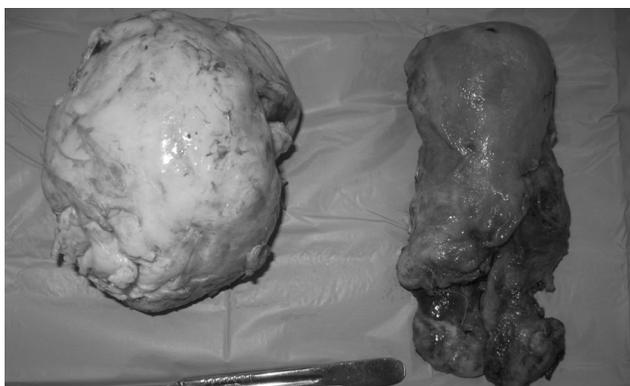


Fig. 3

Figure 1. — Vaginal view of the submucous pedunculated leiomyoma. The anterior cervix is shown covering the uterine leiomyoma next to vaginal introitus.

Figure 2. — Myomectomy of the giant leiomyoma.

Figure 3. — Giant uterine leiomyoma on the left side; uterus after vaginal hysterectomy in the right position.

inal hysterectomy because the pedicle could not be reached during the leiomyoma extraction. This last episode happened with us and was confirmed by histopathology. Most prolapsed leiomyomas are large in extension; however, if we consider the diameter measurement, this case reports one of the largest leiomyomas that has ever been extracted. Most probably this contributed to the difficulty in removing it.

This report has described a giant prolapsed leiomyoma that should have been exhaustively preinvestigated with imaging exams and discussed with the surgical team before initiating the procedure. Special attention should be taken to locate the pedicle. Counseling the patient about a possible hysterectomy in case of failure of myomectomy should be done.

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