

Omentum Mimicking as a Vaginal Prolapse in a Delayed Vaginal Cuff Dehiscence

Kanika Gupta ¹, Vivek Mangla ², Sanjeev Arora ¹, Gautam Anand ³, Shubham Bidhuri ¹

Review began 11/18/2023

Review ended 12/08/2023

Published 12/17/2023

© Copyright 2023

Gupta et al. This is an open access article distributed under the terms of the Creative Commons Attribution License CC-BY 4.0., which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

1. Gynecologic Oncology, Max Healthcare, New Delhi, IND 2. Gastrointestinal Surgery, Max Healthcare, New Delhi, IND 3. Surgical Oncology, Max Super Specialty Hospital, Vaishali, Ghaziabad, IND

Corresponding author: Gautam Anand, gautam16alok@gmail.com

Abstract

A rare consequence of hysterectomy is vaginal vault dehiscence, which commonly occurs five to seven weeks after the procedure. Its frequency ranges from 0% to 7.5%. The incidence of delayed dehiscence is rare. The small bowel is the organ that prolapses most frequently, but other organs and multi-organ prolapses have also been documented. Due to potential catastrophes such as intestinal ischemia, blockage, and perforation, transvaginal protrusion of abdominal viscera is an emergency. A laparoscopic approach facilitates a thorough evaluation of the abdominal contents and provides assistance in challenging circumstances where the contents are not reducible.

Categories: Obstetrics/Gynecology, Oncology

Keywords: minimally invasive procedure, vaginal hysterectomy, total laparoscopic hysterectomy, omental prolapse, vaginal cuff dehiscence

Introduction

Patients with a history of hysterectomy can experience vaginal cuff dehiscence. Abdominal contents may protrude into the vagina through the vaginal cuff. Its frequency ranges from 0 to 7.5% [1]. Typically, it occurs five to seven weeks following surgery [2]. The incidence of delayed dehiscence is rare. The small bowel is the organ that prolapses most frequently, but other organs and multi-organ prolapses have also been documented [3]. To avoid further complication, abdominal organ prolapse requires immediate medical attention [4]. We describe an instance of delayed vaginal vault dehiscence with omental prolapse treated with a laparoscopic approach six months after the total laparoscopic hysterectomy.

Case Presentation

A 53-year-old lady without any comorbidity underwent total laparoscopic hysterectomy for uterine fibroids six months back. She complained of pain in the lower abdomen with something coming out per vaginum for the last five days. On examination, her vitals were stable. On per abdomen examination, the abdomen was soft, non-tender, with no guarding or rigidity present. On perineal examination, there was omental herniation through a defect in the vaginal vault. The prolapsed content was dusky and necrosed, and it was irreducible (Figure 1).

How to cite this article

Gupta K, Mangla V, Arora S, et al. (December 17, 2023) Omentum Mimicking as a Vaginal Prolapse in a Delayed Vaginal Cuff Dehiscence. Cureus 15(12): e50647. DOI 10.7759/cureus.50647



FIGURE 1: External pelvic examination showing a necrosed omental herniating through the vagina. Content was irreducible.

The patient was immediately planned for examination under anesthesia. Intraoperative findings confirmed the herniating mass as necrosed omentum through the dehiscence vaginal cuff. She underwent diagnostic laparoscopy with excision of the prolapsed omentum. Laparoscopic adhesiolysis was performed, and the margins of the vaginal vault were identified (Figure 2).

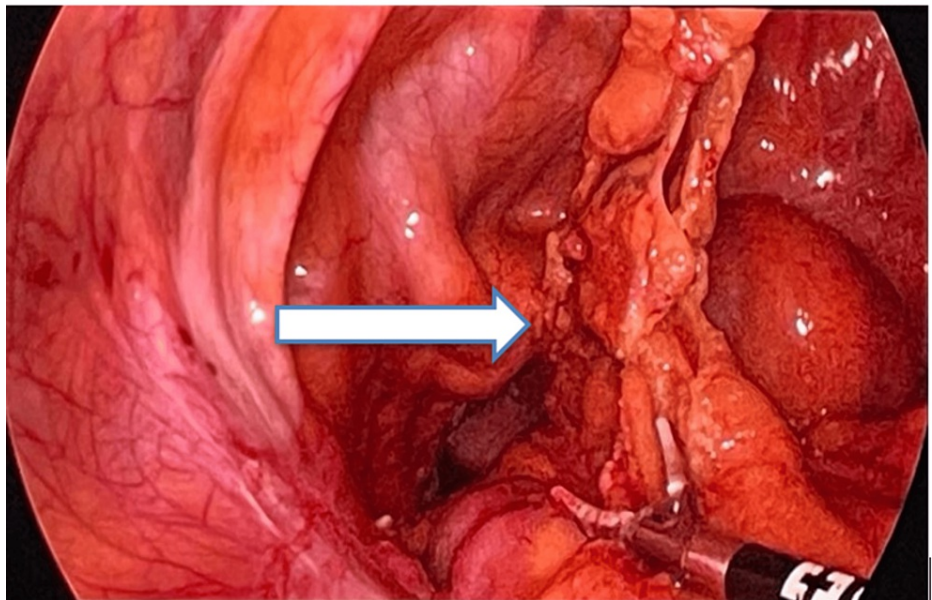


FIGURE 2: Intraoperatively, on laparoscopy, omentum prolapsing through the dehiscence vaginal cuff (marked by arrow).

After excision of the prolapsed omentum, the specimen was retrieved transvaginally. The vaginal vault defect closure was done using Prolene 1.0 sutures after refining the margins (Figure 3).

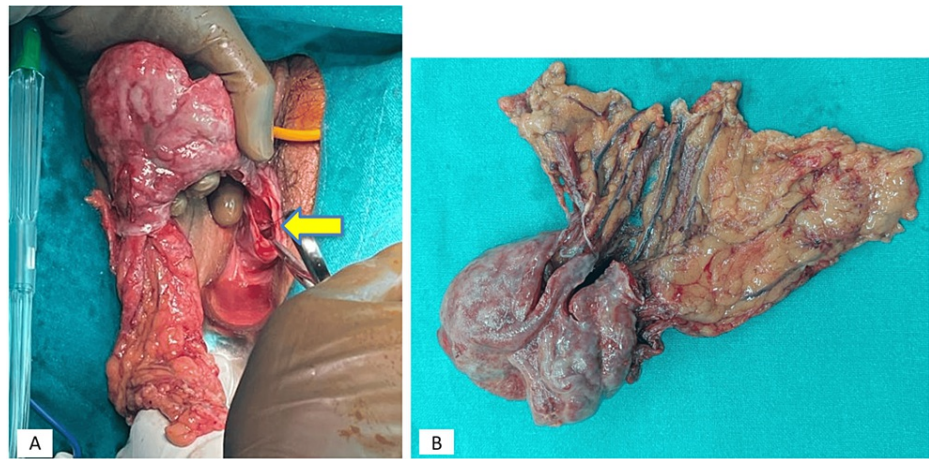


FIGURE 3: (A) Specimen delivered per vaginally after ligating the omental stalk laparoscopically (yellow arrow showing dehiscence of vaginal vault margin). (B) Final specimen showing necrosed and dusky prolapsed part with the normal omentum proximally.

The patient tolerated the procedure well, and the postoperative period was uneventful. She was discharged on the third postoperative day. Now, in the routine follow-up, she is doing well.

Discussion

A rare consequence of hysterectomy is vaginal vault dehiscence, which commonly occurs five to seven weeks after the procedure [2]. In our case, a rare incident of delayed dehiscence, the vault dehiscence with omentum prolapse, occurred six months after the surgery. In comparison to total abdominal hysterectomy (0.15%), total vaginal hysterectomy (0.08%), and laparoscopic-assisted vaginal hysterectomy (0.28%), vaginal cuff dehiscence is projected to occur at a rate of 0.4%. It is more frequent after total laparoscopic hysterectomy (1.36%) [5]. Risk factors for vault dehiscence include old age, diabetes, postmenopausal status, smoking, steroids, and poor technique of vault closure [6]. The patient might also experience genital pain, pelvic discomfort, and vaginal discharge. Although the evisceration of the colon, omentum, adnexa, urinary bladder, appendix, and even numerous organs has been recorded in the literature, the small bowel is the most often eviscerated organ [3]. Due to potential catastrophes such as intestinal ischemia, blockage, and perforation, transvaginal protrusion of abdominal viscera is an emergency. To prevent further injury, it is advisable to wrap the contents with a moist mop, and the patient must be placed in the supine position. The treatment of vaginal vault dehiscence with abdominal content prolapse is not standardized.

The three kinds of procedures discussed in the literature are transvaginal, transabdominal open, and transabdominal laparoscopic [7]. The choice of procedure depends on the evisceration's content, the contents' reducibility and ischemia, the presence of an intra-abdominal collection, the level of expertise on hand, and the stability of the patient. The least invasive method appears to be transvaginal, suitable when the contents are small, easily reducible, and there are no signs of ischemia or intra-abdominal collection. However, the biggest drawback of the transvaginal approach is its limited ability to view the abdominal contents. The transabdominal approach is preferred when the contents are ischemic and irreducible, there are abdominal symptoms present, and there are intra-abdominal collections. The transabdominal open approach offers a clearer view of the abdominal contents and allows for easy bowel or omentum resection, but the main disadvantage is the morbidity of open surgery. Over the two techniques mentioned above, the laparoscopic transabdominal approach has the benefit of being less invasive and enabling visibility of the abdominal viscera [8].

To prevent sepsis and peritonitis, reduced contents must be thoroughly checked, and any ischemic bowel or omentum must be removed. After the contents have been reduced, it is crucial to properly close the vault to avoid another incident.

Conclusions

Vaginal vault dehiscence following hysterectomy is rare, often occurring five to seven weeks after the operation. Delayed dehiscence is even rarer. Vault dehiscence can cause several abdominal organs to prolapse; this condition needs immediate treatment to avoid future consequences. The laparoscopic approach facilitates a thorough evaluation of the abdominal contents and provides assistance in challenging circumstances where the contents are irreducible. It offers the advantages of a minimally invasive procedure.

Additional Information

Author Contributions

All authors have reviewed the final version to be published and agreed to be accountable for all aspects of the work.

Concept and design: Gautam Anand, Kanika Gupta, Shubham Bidhuri, Vivek Mangla, Sanjeev Arora

Acquisition, analysis, or interpretation of data: Gautam Anand, Kanika Gupta, Shubham Bidhuri, Vivek Mangla, Sanjeev Arora

Drafting of the manuscript: Gautam Anand, Kanika Gupta, Shubham Bidhuri, Vivek Mangla, Sanjeev Arora

Critical review of the manuscript for important intellectual content: Gautam Anand, Kanika Gupta, Shubham Bidhuri, Vivek Mangla, Sanjeev Arora

Supervision: Gautam Anand, Kanika Gupta, Shubham Bidhuri, Vivek Mangla, Sanjeev Arora

Disclosures

Human subjects: Consent was obtained or waived by all participants in this study. **Conflicts of interest:** In compliance with the ICMJE uniform disclosure form, all authors declare the following: **Payment/services info:** All authors have declared that no financial support was received from any organization for the submitted work. **Financial relationships:** All authors have declared that they have no financial relationships at present or within the previous three years with any organizations that might have an interest in the submitted work. **Other relationships:** All authors have declared that there are no other relationships or activities that could appear to have influenced the submitted work.

References

1. Binz NM: Complications of gynecologic procedures. Tintinalli's Emergency Medicine: A Comprehensive Study Guide. Tintinalli JE, Ma OJ, Yealy DM, Meckler GD, Stapczynski JS, Cline DM, Thomas SH (ed): McGraw-Hill Education, New York; 2020.
2. Hur HC, Lightfoot M, McMillin MG, Kho KA: Vaginal cuff dehiscence and evisceration: a review of the literature. *Curr Opin Obstet Gynecol.* 2016, 28:297-303. [10.1097/GCO.0000000000000294](https://doi.org/10.1097/GCO.0000000000000294)
3. Zhou Y, Zhang Y, Liu W, et al.: Spontaneous vaginal cuff dehiscence and evisceration of multiple organs: a case report. *Medicine (Baltimore).* 2018, 97:e13670. [10.1097/MD.00000000000013670](https://doi.org/10.1097/MD.00000000000013670)
4. Sokol ER, Munro EG: Incarcerated vaginal herniation of the omentum mimicking vaginal prolapse. *Am J Obstet Gynecol.* 2007, 196:e7-8. [10.1016/j.ajog.2006.11.030](https://doi.org/10.1016/j.ajog.2006.11.030)
5. Clarke-Pearson DL, Geller EJ: Complications of hysterectomy. *Obstet Gynecol.* 2013, 121:654-73. [10.1097/AOG.0b013e3182841594](https://doi.org/10.1097/AOG.0b013e3182841594)
6. Escobar PA, Gressel GM, Goldberg GL, Kuo DY: Delayed presentation of vaginal cuff dehiscence after robotic hysterectomy for gynecologic cancer: a case series and review of the literature. *Case Rep Obstet Gynecol.* 2016, 2016:5296536. [10.1155/2016/5296536](https://doi.org/10.1155/2016/5296536)
7. Matsuhashi T, Nakanishi K, Hamano E, Kamoi S, Takeshita T: Laparoscopic repair of vaginal evisceration after abdominal hysterectomy for uterine corpus cancer: a case report and literature review. *J Nippon Med Sch.* 2017, 84:90-5. [10.1272/jnms.84.90](https://doi.org/10.1272/jnms.84.90)
8. Solberg J, Saravana K: Omental prolapse through vaginal cuff dehiscence. *Clin Pract Cases Emerg Med.* 2022, 6:262-3. [10.5811/cpcem.2022.2.56353](https://doi.org/10.5811/cpcem.2022.2.56353)