Case Report

Vaginal Cuff Dehiscence and Evisceration 40-Years after Abdominal Hysterectomy

Gabriella Pinho, MD*, Chloe Phillips, MD, Lisa Podolsky, MD and Pierre Lespinasse, MD

Department of Obstetrics, Gynecology & Women’s Health, Rutgers New Jersey Medical School, USA

Abstract

Vaginal cuff dehiscence is a rare but serious complication of hysterectomy and carries even more risk of morbidity and mortality when evisceration occurs. Vaginal cuff dehiscence can occur at any time after hysterectomy; thus, it is important to identify risk factors in patients and counsel them on signs and symptoms of dehiscence. Once diagnosed, minimally invasive approaches such as vaginal and laparoscopic techniques should be the preferred method of repair. We present a case of an 85-year-old woman who presented with abdominal pain and sensation of a bulge in her vagina 40-years after total abdominal hysterectomy. She was diagnosed with vaginal cuff dehiscence and evisceration and underwent complete vaginal repair and colpocleisis.

Keywords

Vaginal cuff dehiscence, Bowel evisceration, Vaginal repair, Colpocleisis

Introduction

Vaginal cuff dehiscence and eviscerations are rare but serious complications of hysterectomy, which are defined as the partial or total separation of the vaginal cuff with protrusion of abdominal and/or pelvic contents into the vagina [1]. The incidence of vaginal cuff dehiscence varies based on the method of hysterectomy with 1.4% occurrence after laparoscopic/robotic approach vs. 0.14-0.27% occurrence with vaginal and open abdominal approach [2,3]. The even rarer subset of this complication, evisceration through the vaginal cuff, occurs approximately 0.03-1.2% of the time and can include pelvic and abdominal organs such as the small bowel, omentum, fallopian tubes, and/or appendix [1-3].

Although the occurrence is rare, the morbidity and mortality of this complication is high secondary to potential bowel strangulation, incarceration, necrosis, and/or perforation [4]. There is also risk for vaginal bacteria to enter the peritoneal cavity leading to peritonitis and sepsis [4]. Risk factors for vaginal cuff dehiscence include postmenopausal status, multiparity, early resumption of sexual activity post-hysterectomy, factors associated with poor wound healing (including malignancy, chronic steroid use, malnutrition, tissue radiation, immunocompromise, and diabetes mellitus), repetitive Valsalva Maneuver (chronic cough), and postoperative vaginal cuff infection or hematoma [2,5,6]. The following describes an interesting case of vaginal cuff dehiscence and evisceration as it took place greater than 40-years after hysterectomy was performed.

Case

The patient is an 85-year-old woman, gravida 5, para 3, with a significant past medical history of coronary artery disease, hypertension, and hyperlipidemia. Her past surgical history is significant for total abdominal hysterectomy performed in 1980 for unknown etiology. She presented to an outside hospital with complaint of abdominal pain and a mass protruding through her vagina. On presentation, the patient reported she was straining in the bathroom to have a bowel movement and had sudden onset severe abdominal pain and sensation that a mass was protruding into her vagina. On evaluation in the emergency room the patient was diagnosed with vaginal cuff dehiscence and small bowel evisceration into the vagina. The small bowel was returned through the vagina into the abdominal cavity and vaginal packing was inserted to prevent further protrusion of the bowel. A Foley catheter was also placed at this time. The patient was given Vancomycin 1g and then subsequently started on Piperacillin/Tazobactam 3.375 g q6 h and Metronidazole 500 mg q8 h.

*Corresponding author: Gabriella Pinho, MD, Department of Obstetrics, Gynecology & Women’s Health, Rutgers New Jersey Medical School, 185 South Orange Avenue, Medical Science Building, MSB E-506, Newark, NJ 07103, USA

Accepted: July 23, 2020
Published online: July 25, 2020

Citation: Pinho G, Phillips C, PodolskyL, et al. (2020) Vaginal Cuff Dehiscence and Evisceration 40-Years after Abdominal Hysterectomy. Reports Gynecol Surg 3(1):27-30

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The patient had a CT scan of the abdomen and pelvis confirming prolapse of the bowel into the vagina. Preparations were then made to transfer the patient to our facility for further evaluation and surgical management.

Upon arrival, she reported mild abdominal pain that was able to be controlled with intravenous pain medications. The patient denied any previous history of vaginal cuff dehiscence or prolapse of the vaginal cuff since her original surgery in 1980; however, she had not seen a gynecologist in approximately 10-years. She denied any previous problems with urination or defecation. She reports she was last sexually active approximately 5-years ago and did not plan on being sexually active again.

Her vital signs on admission were 98.0 °F, pulse 60, respiratory rate 18, and blood pressure 186/81. Her WBC on admission was normal, her Hgb was 11.1 g/dl and she had no electrolyte abnormalities. Vaginal packing and Foley catheter were left in place with plans to do exam under anesthesia in the operating room at time of repair. Exam under anesthesia in the operating room revealed epithelialized omentum protruding into the vagina (Figure 1A) and bowel adherent to inner aspect of the vaginal epithelium (Figure 1B). The vaginal cuff opening was measured to be 8.0 × 5.0 cm. The portion of the epithelialized omentum protruding through the vagina was excised. Vaginal epithelium was dissected off for colpocleisis. Adhesions from the bowel were released. The bowel was examined and noted to be healthy appearing and was replaced through the vagina into the pelvis (Figure 1C). A colpocleisis was then performed in the usual fashion (Figure 1D).

Pathology revealed omental adipose tissue with focal acute inflammation and fibrosis and benign squamous mucosa with hyperkeratosis of the vaginal epithelium.

The patient met all her postoperative milestones and was ultimately discharged home in stable condition on post-operative day three. She was seen in the outpatient clinic on post-operative day nine and on exam operative site was intact and healing well.

**Discussion**

Our patient’s case is unusual in that her cuff dehiscence occurred 40-years after her abdominal hysterectomy. In re-
Vaginal cuff dehiscence with evisceration, although rare, is a serious complication of hysterectomy that needs to be diagnosed quickly and managed appropriately to avoid severe morbidity for affected patients. Minimally invasive manage-
ment with vaginal or laparoscopic approaches are preferred when appropriate. When there is no concern for bowel injury even if there is evisceration, it is safe to manage the case with a vaginal approach as made evident by our case.

Acknowledgment
None.

Disclosures
The authors have nothing to disclose.

Disclosure Statement
All authors declare that they have no conflicts of interest and nothing to disclose.

Ethics Statement
No IRB approval was required to write this case report.

Source of Funding
None.

Statement of Prior Presentation/Publication
This manuscript has not been submitted for prior publication or presentation.

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