

Laparoscopic Repair of Postcoital Vaginal Evisceration with Intact Pelvic Organs

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ABSTRACT

Vaginal evisceration following hysterectomy occurs predominantly in postmenopausal patients. Laparotomic repair is most common. This case of a 17-year-old patient with postcoital vaginal evisceration represents the first reported laparoscopic repair in a premenopausal patient with intact pelvic organs.

Key Words: Vaginal evisceration, Vaginal dehiscence, Premenopausal, Postcoital.

INTRODUCTION

Fewer than 5 of the 130 reported vaginal evisceration cases involve patients without prior pelvic/vaginal surgery, chemotherapy, or radiation.¹⁻⁴ Laparoscopic repair of a vaginal evisceration in a premenopausal patient with intact pelvic organs is previously unreported.

METHODS

A 17-year-old nullipara female presented to the Emergency Department (ED) with acute postcoital vaginal bleeding, right-sided pelvic pain, abdominal pain, and flank pain. The patient had engaged in consensual intercourse without the use of foreign bodies, other than a condom, several hours prior to presentation. Her past medical, surgical, social, and gynecologic histories are significant for repair of tetralogy of Fallot as a child, asthma, and depression.

Initial ED evaluation was performed and vital signs were stable. The on-call gynecologist was consulted. Upon gynecologic evaluation, the patient was alert and oriented with a stable cardiovascular examination. The abdominal examination demonstrated increased tenderness from initial presentation. The pelvic examination revealed a normal-appearing external genitalia without significant abrasions, lacerations, or perineal tears. The speculum examination revealed a laceration at the cervical-vaginal junction of the posterior fornix with mild bleeding.

The patient was initially observed in the ED but was subsequently taken to the operating room after bleeding continued. In the operating room, she was initially noted to have a narrow introitus with limited vaginal exposure. On further evaluation with a narrow speculum, she was noted to have a well-perfused, peristalsing small bowel protruding through a horizontal cervical-vaginal defect. It was felt that there was insufficient exposure for an adequate vaginal approach to the required repair. The decision was, therefore, made to proceed with a laparoscopic repair. The following ports were placed: a 10-mm umbilical laparoscopic port, an 11-mm left lateral port, a lower left 5-mm port, and a right lateral 5-mm port. The patient was placed in the Trendelenburg position. The eviscerated bowel was carefully reduced into the peritoneal cav-

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The authors would like to acknowledge Carol Cox, MD, for consulting Stuart Hart, MD, in the care of this patient.

Presented as a video at the 38th Global Congress of Minimally Invasive Gynecology, Orlando, Florida, USA. November 15-19, 2009.

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DOI: 10.4293/108680812X13291597716825

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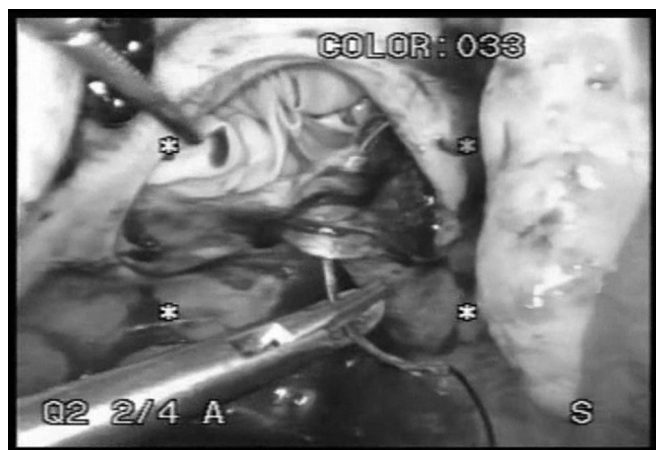


Figure 1. The laparoscopic repair of a postcoital vaginal laceration, extending to the bilateral broad ligaments, in a premenopausal patient.

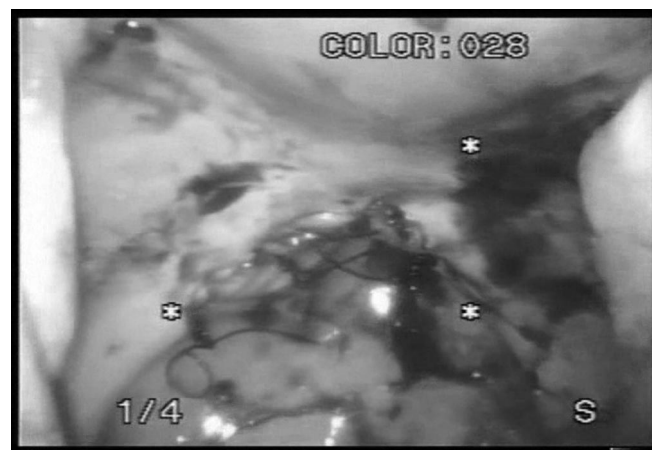


Figure 2. The completed repair of a postcoital vaginal laceration in a premenopausal patient.

ity, laparoscopically, by using a blunt probe and atraumatic grasper. It was carefully inspected and found to be well perfused throughout.

A moist laparotomy sponge wrapped in a surgical glove was placed vaginally to maintain pneumoperitoneum and delineate what appeared to be a 6-cm semi-lunar defect coursing along the posterior cervical-vaginal junction and partially through the uterosacral ligaments bilaterally. The wound edges were reapproximated with 4 figure-of-eight polydioxanone sutures (**Figures 1 and 2**). The abdomen and pelvis were copiously irrigated. No other abnormalities were noted during the laparoscopic procedure.

RESULTS

The patient tolerated the procedure well. She was admitted for observation and transfused 2 units of packed red blood cells for a hemoglobin level of 8.4. Her postoperative course was otherwise uncomplicated, she remained hemodynamically stable, and she was discharged home within 24 hours. At the 2-week follow-up speculum examination, the laceration was significantly healed with normal vaginal anatomy.

DISCUSSION

This case demonstrates the feasibility of a laparoscopic repair of a vaginal eversion when a vaginal approach

is not optimal. In this patient, the horizontal cervical-vaginal laceration extended into the uterosacral ligaments bilaterally and was combined with eversion of the small bowel through the defect. The full extent of the defect was not appreciated on vaginal examination, mainly due to a narrow introitus that limited exposure. Optimal anatomic repair in this young patient was possible because of the visualization provided by the laparoscopic approach. Even in cases of a deep vaginal laceration extending into the peritoneal cavity, without eversion, a laparoscopic approach may simplify the repair for patients with intact pelvic organs and limited vaginal exposure to ensure proper restoration of normal anatomy.

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