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TRANSVAGINAL INTESTINAL EVISCERATION AFTER HYSTERECTOMY

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Abstract

Transvaginal intestinal evisceration is an exceptionally rare and insufficiently documented complication of vaginal hysterectomy, requiring rapid recognition and surgical management to avoid serious outcomes such as bowel ischemia, perforation, and sepsis. We report the case of a 70-year-old woman who had undergone vaginal hysterectomy fourteen months before she presented with acute abdominal pain accompanied by a substantial segment of small bowel protruding through a defect in the vaginal vault. She was immediately taken to the operating room, where the abdominal cavity was opened and the bowel was manually reinserted into the abdominal cavity, and the vaginal defect was closed with a medical stapler. Several surgical strategies—including laparoscopic, abdominal, transvaginal, and combined approaches—have been described, each demonstrating comparable results. Consequently, the choice of technique should be individualized based on the patient's clinical condition.

Keywords: *Hysterectomy; transvaginal intestinal evisceration.*

Introduction

Transvaginal intestinal evisceration is a rare yet potentially fatal surgical emergency, with only a small number of cases documented in the literature, which limits accurate estimation of its true incidence (1-2). Its etiology is understood to be multifactorial, with several predisposing factors contributing to its development. Clinically, the condition most commonly presents as herniation of the small intestine through the vaginal canal, frequently resulting in intestinal obstruction. (3,4,). Diagnosis is usually established through imaging modalities or incidentally during exploratory laparotomy. In exceptionally uncommon and dramatic presentations, large segments of small bowel may prolapse externally through the vagina, placing the patient at substantial risk for intestinal compromise and loss of viability (5,6,7). Such a presentation occurred in the current case, in which the patient arrived with abrupt onset of severe abdominal pain and spontaneous transvaginal evisceration of the small intestine, necessitating immediate surgical intervention to mitigate further complications. This report is prepared in accordance with CARE Guidelines (8).

Case report

A 70-year-old woman was admitted on April 4, 2025, as an emergency due to a prolapsed vaginal cuff with eviscerated small intestine protruding through the vagina (Image 1). She reported sudden severe abdominal pain, weakness, and dizziness, while denying constipation, coughing, or recent trauma—common precipitating factors for increased intra-abdominal pressure—making their absence clinically notable. Her obstetric history included two full-term vaginal deliveries, and she had no prior diagnosis of chronic uterine prolapse. Fourteen months before presentation, she had undergone hysterectomy, and across the same period she subsequently required three separate surgical procedures for recurrent partial vaginal prolapse of the small intestine, two performed by gynecologists and one by an abdominal surgeon, illustrating the recurrent and complex nature of her condition. Her medical history included well-controlled arterial hypertension and diabetes mellitus.

Image 1. (Pre op image of Transvaginal intestinal evisceration)

On admission, the patient appeared significantly compromised. Physical examination revealed pallor of the skin, a pulse of 100 beats per minute, and blood pressure of 125/80 mmHg. Abdominal evaluation demonstrated pronounced lower-quadrant tenderness and hypoactive bowel sounds, indicative of reduced intestinal motility and possible obstruction. Perineal examination revealed that approximately 40–50 cm of small bowel had prolapsed through the vaginal canal. The exposed segment was edematous, thickened, and discolored in a manner suggestive of impaired perfusion, though without overt necrosis. Laboratory results showed anemia (hemoglobin 100 g/L) and elevated inflammatory markers, including leukocytosis (14.7×10^9/L), C-reactive protein (48 mg/dL), and fibrinogen (5.4 g/L), consistent with acute inflammation and possible infection. KT tomography was made and indicated transvaginal intestinal evisceration (image 2 and 3)

Image 2.

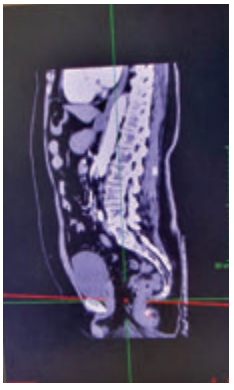

Image 3.

After brief preoperative stabilization, the patient underwent mid-to-lower laparotomy. Upon entering the abdominal cavity, ileus-altered small intestine was found incarcerated through the vaginal defect, and the associated mesentery appeared dusky and ecchymotic, indicating compromised venous return. The bowel was manually reduced, and the vaginal defect was closed using a stapling device, followed by meticulous hemostasis and copious abdominal lavage (image 4). Postoperative management included fluid resuscitation and prompt initiation of intravenous broad-spectrum antibiotics.

Image 4.

The patient recovered uneventfully and was discharged on April 14, 2025, in good general condition, with recommendations for one month of rest and avoidance of strenuous physical activity for four months.

Discussion

Transvaginal intestinal evisceration is a rare but serious surgical emergency first described by McGregor in 1907 and remains infrequently reported in the literature. Most commonly, it affects postmenopausal women and those with a history of pelvic surgery, particularly hysterectomy (9–10). The incidence is difficult to determine due to its rarity, but several anatomical and physiological factors have been proposed, including weakening of the pelvic floor, vaginal atrophy caused by estrogen deficiency, and surgical disruption of support structures (11). In approximately two-thirds of reported cases, vaginal cuff dehiscence occurs following hysterectomy, often in the context of increased intra-abdominal pressure or trauma (12,13). Our patient's presentation is consistent with this pattern, with transvaginal evisceration occurring fourteen months after hysterectomy; however, her case is further complicated by multiple recurrent episodes requiring surgical intervention.

Notably, the patient denied experiencing common precipitating factors such as coughing, straining, or trauma, which are frequently implicated in the pathogenesis of evisceration through sudden increases in intra-abdominal pressure (14). The absence of such triggers highlights the possibility that persistent structural weakness of the vaginal cuff combined with compromised tissue integrity—potentially exacerbated by previous surgeries—played a central role in her presentation. Recurrent prolapse of small bowel segments through the vaginal canal, as observed in this patient, is exceptionally uncommon and has been described in only a handful of reports, emphasizing the complexity of her underlying pelvic floor dysfunction (15).

Clinically, transvaginal intestinal evisceration typically presents as acute abdominal pain associated with visible bowel protrusion, constituting a true surgical emergency given the high risk of bowel ischemia, necrosis, and subsequent sepsis. In this case, the identification of edematous and discolored small bowel loops, along with hypoactive bowel sounds and elevated inflammatory markers, indicated evolving bowel compromise. Although no frank necrosis was present, the dusky and ecchymotic appearance of the mesentery at laparotomy was consistent with impaired venous return and imminent risk of ischemia, underscoring the need for rapid operative management. Current literature strongly advocates immediate surgical intervention, including reduction of the eviscerated bowel, assessment of viability, and secure repair of the vaginal defect, as delays significantly increase morbidity and mortality (16,17).

The surgical approach taken—mid-to-lower laparotomy with manual reduction, thorough inspection of bowel viability, closure of the vaginal defect using stapling techniques, and extensive peritoneal lavage—aligns with recommendations from previous case series and reviews. Ensuring hemostasis and initiating early broad-spectrum antibiotics are also emphasized in the literature as essential components of postoperative care to reduce the risk of intra-abdominal infection and recurrence (18).

The patient's favorable postoperative recovery and discharge in good condition demonstrate the effectiveness of prompt recognition and timely surgical management. However, her history of recurrent prolapse underscores the importance of considering long-term preventive strategies. Several authors suggest that reinforcing the vaginal cuff, addressing pelvic floor weaknesses, and optimizing postoperative rehabilitation may help reduce recurrence risk, particularly in individuals with multiple prior surgeries or other predisposing factors (19,20).

Overall, this case adds to the limited body of evidence on recurrent transvaginal intestinal evisceration and highlights the need for heightened clinical vigilance in patients with previous hysterectomy and repeated pelvic surgeries. Early diagnosis and emergent surgical repair remain crucial to preventing bowel ischemia, sepsis, and life-threatening complications.

Conclusion

Transvaginal intestinal evisceration thus represents an exceptionally uncommon but severe surgical emergency, and early recognition combined with urgent operative management is critical to preventing bowel ischemia and subsequent sepsis. When the eviscerated intestinal segment is non-viable, resection with primary anastomosis is required to restore bowel continuity. Optimal management should be individualized and undertaken by a multidisciplinary team to ensure the best possible clinical outcomes.

Refences:

1. Arabadzhieva E, Bulanov D, Shavalov Z, Yonkov A, Bonev S. Spontaneous transvaginal intestinal evisceration in case of long-standing uterine prolapse. BMC Surg. 2022 May 4;22(1):157. doi: 10.1186/s12893-022-01615-x. PMID: 35509095; PMCID: PMC9066937.
2. Rogers P, Lee H, Jape K, Ng ZQ, Koong D. Vaginal evisceration of small bowel. J Surg Case Rep. 2019; 11:1–3. doi: 10.1093/jscr/rjz317.

3. Amakpa E, Hernandez-Gonzalez G, Camejo-Rodriguez E. Small bowel evisceration in a perforated uterine prolapse. Ghana Med J. 2021;55(2):156–159. doi: 10.4314/gmj. v55i2.10.
4. Rana AM, Rana A, Salama Y. Small bowel evisceration through the vaginal vault: a rare surgical emergency. Cureus. 2019;11(10):e5947. doi: 10.7759/cureus.5947.
5. Bendjaballah A, Taieb M, Haidar A, Khiali R, Ammari S, et al. Evisceration of small intestine through the vagina: a rare surgical cause of acute intestinal obstruction. J Univer Surg. 2020;8(3):1.
6. Negrete JR, Molina GA, Sanchez AC, et al. Transvaginal evisceration of the small bowel a rare and potentially lethal event, a case report. Ann Med Surg (Lond) 2021; 65:102352. doi: 10.1016/j.amsu.2021.102352.
7. Toh JWT, Lee T, Chiong C, Ctercteko G, Pathma-Nathan N, El Khoury T, Wright D, King J. Transvaginal evisceration of small bowel. ANZ J Surg. 2018;89(6):774–776. doi: 10.1111/ans.14290.
8. Parra RS, Rocha JJ, Feres O. Spontaneous transvaginal small bowel evisceration: a case report. Clinics (Sao Paulo) 2010; 65:559–561. doi: 10.1590/S1807-59322010000500015.
9. Chan A, Oluwajobi O, Ehsan A, et al. Transvaginal evisceration of the small bowel more than 15 years after abdominal hysterectomy and vaginal surgery. Cureus. 2021;13(3):e13955. doi: 10.7759/cureus.13955.
10. Kang WD, Kim SM, Choi HO. Vaginal evisceration after radical hysterectomy and adjuvant radiation. J Gynecol Oncol. 2009; 20:63–64. doi: 10.3802/jgo.2009.20.1.63.
11. Croak AJ, Gebhart JB, Klingele CJ, Schroeder G, Lee RA, Podratz KC. Characteristics of patients with vaginal rupture and evisceration. Obstet Gynecol. 2004; 103:572–576. doi: 10.1097/01.AOG.0000115507.26155.45.
12. Hur HC, Lightfoot M, McMillin MG, Kho KA. Vaginal cuff dehiscence after different modes of hysterectomy. Obstet Gynecol. 2011;118(4):794–801.
13. Cronin B, Sung VW, Matteson KA. Vaginal cuff dehiscence: risk factors and management. Am J Obstet Gynecol. 2012; 206:284–288.
14. de Kroon CD, Buster L, Huirne JA. Vaginal cuff dehiscence in relation to increased intra-abdominal pressure: report of two cases. Int Urogynecol J. 2011;22(1):135–138.
15. Guttman A, Afilalo M, Thiffault J. Recurrent vaginal evisceration: a rare clinical phenomenon. Int J Gynaecol Obstet. 1988;27(4):559–562.
16. Kothari SN, Starr JE. Transvaginal small bowel evisceration: case report and review of management. Surg Laparosc Endosc Percutan Tech. 2001;11(3):180–184.
17. Nasr AO, Tuma F, Karim MA. Transvaginal evisceration: emergency management and surgical considerations. Am Surg. 2010;76(4):E75–E77.
18. Rodriguez MI, Quint EH, Dillon J, et al. Repair of vaginal cuff dehiscence: surgical considerations and postoperative outcomes. J Minim Invasive Gynecol. 2011; 18:31–35.
19. Bae J, Kim S, Lee JH. Prevention of vaginal cuff complications after hysterectomy: review of surgical techniques. Obstet Gynecol Sci. 2019;62(5):290–301.
20. Price N, Slack A, Jackson SR. Pelvic floor rehabilitation and support strategies following hysterectomy. Int Urogynecol J. 2010;21(2):247–254