

Case Report

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# Spontaneous transvaginal small bowel evisceration secondary to vaginal cuff dehiscence after abdominal hysterectomy: A case report<sup> $\star$ </sup>



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ARTICLE INFO	A B S T R A C T
Keywords: Hysterectomy Small bowel evisceration Vaginal surgery Case report	<i>Introduction</i> : and importance: Small intestinal evisceration through the vaginal canal is a rare surgical emergency that necessitates immediate surgery to avoid bowel necrosis, infection, and death. It was first documented in 1864.
	<i>Case presentation:</i> A 55-year-old postmenopausal woman was reported to the emergency department with an 8-h history of moderate lower abdomen pain and diarrhea. After investigation, the patient was diagnosed with transvaginal small bowel evisceration, and vaginal cuff dehiscence was repaired. <i>Clinical discussion:</i> Given the high death rates associated with this illness, we publish this case to promote awareness of therapeutic techniques. Second, it highlights the significance of interdisciplinary surgical collaboration in achieving the greatest possible patient outcome.
	<i>Conclusion:</i> An operation should be performed to avoid significant complications such as peritonitis, sepsis, and septic shock, considering the disease's rarity and high fatality rate if not treated early.

#### 1. Background

Small intestinal evisceration through the vaginal canal is a rare surgical emergency that necessitates immediate surgery to avoid bowel necrosis, infection, and death. It was first documented in 1864. Since the publication of Hyernaux [1], there have been less than 100 cases reported.

Previous vaginal surgery, enterocele, and advanced age are all risk factors [2]. Surgery is required to prevent complications such as intestinal ischemia, ileus, and peritonitis, despite the fact that it usually presents with a less dramatic clinical condition.

We discuss a case of vaginal vault rupture with vaginal evisceration, as well as the risk factors, clinical presentation, and treatment options for this uncommon gynecological emergency.

## 2. Case presentation

A 55-year-old postmenopausal woman was reported to the emergency department with an 8-hour history of moderate lower abdomen pain and diarrhea. In addition, the patient stated that she had left her luggage before experiencing the symptoms. As she tried to have a bowel movement in the toilet, the patient stated that she "felt something coming out of her vagina."The patient stated that she underwent left nephrectomy and laparoscopic cholecystectomy for gall stones in the past, with her most recent operation being a lower midline laparotomy for hysterectomy 8 months ago. Vital signs on presentation were: BP 121/62, pulse 82, T 36.3, and SPO2 97. On abdominal examination, there is mild suprapubic pain. On vaginal examination with a speculum, their small bowel was eviscerated through the vagina as you see in figure (1). After that, we ordered a blood investigation and a CT abdomen with IV contrast for the exclusion of other abdominal pathology. The laboratory results were WBC 8.9 imes 1000/mm3, HGB 13.3 g/dl, PLT 216 imes1000/mm3, and CRP 1. On the CT scan, another significant pathology was not seen. We started IV fluids and broad-spectrum antibiotics in the emergency, after consent from the family. The patient was taken to the operating theatre for emergency surgery, which included both obstetrics and gynaecology and general surgery. The patient was placed in a lithotomy position in the operating room, and the eviscerated bowel was

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Fig. 1. Small bowel eviscerated through the vagina.

manually reduced under general anaesthesia. In the previous incision, a lower midline laparotomy was opened, and the small bowel was examined from the treitz ligament to the ileocecal valve. Only about 20 cm of small bowel from the ileocecal valve was hyperemic and bruising, while the rest of the intestine was clean. Complete vaginal cuff dehiscence was seen, and no signs of infection were seen. The tissues between the anterior vaginal wall and the bladder wall, on the other hand, were extremely delicate and feeble. The granulation tissues at the vaginal cuff's edge were excised, and the defect was closed with an absorbable suture in a continuous interlocking fashion (Fig. 2). The abdomen was then washed with normal saline, one drain was inserted, and the abdomen was closed layer by layer. We began feeding on the first postoperative day, and it was tolerable. On postoperative day four, she was discharged without any complications. At one week of postoperative follow-up, the patient is doing well without complications or any complaints.

#### 3. Discussion and conclusion

Following a hysterectomy, vaginal cuff dehiscence is a rare occurrence, with an estimated prevalence of 0.032% to 1.25% [3]. Vaginal evisceration has been reported following vaginal traumas caused by coitus, obstetric instrumentation, foreign body insertion, and direct trauma, as well as after pelvic surgery and in patients with enterocele [4].

Evisceration can occur spontaneously or in association with a rise in



Fig. 2. Vaginal vault repair.

intra-abdominal pressure caused by coughing, defecating, or falling in postmenopausal women [5]. The risk factors for dehiscence after hysterectomy are restricted to case reports and case report analyses of the literature due to its rarity; there is minimal evidence on the risk factors for dehiscence after hysterectomy. According to a recent review of the literature, dehiscence is more common after robotic-assisted total laparoscopic hysterectomy (2.33%) than total laparoscopic hysterectomy (2.33%) (0.87%). The lowest rate was observed after a complete vaginal hysterectomy. According to Kowalski et al., 68% of evisceration patients were postmenopausal, with 73% having previously undergone vaginal surgery and 63% having an enterocele [6]. Transvaginal small bowel evisceration on clinical presentation, mostly abdominal pain and vaginal bleeding.

In our case, she presented with lower abdominal pain and diarrhea. The patient reported that she "felt something come out of her vagina" while in the toilet. On abdominal examination, there is mild suprapubic pain. The vital signs were stable. Vaginal evisceration is a surgical emergency that requires immediate diagnosis and surgical repair to be properly treated. For optimal evisceration therapy, a thorough assessment of the herniated viscus and surgical repair of the vaginal defect are essential. Regardless, transvaginal and transabdominal techniques can be employed; if there are any uncertainties about the bowel, resection and anastomosis should be accomplished first, followed by vaginal defect repair [7]. In our case, we reduced the eviscerated bowel manually and performed vaginal cuff dehiscence repair by a lower midline laparotomy approach.

Given the high death rates associated with this illness, we publish this case to promote awareness of therapeutic techniques. Second, it highlights the significance of interdisciplinary surgical collaboration in achieving the greatest possible patient outcome.

The operation was performed to avoid significant complications such as peritonitis, sepsis, and septic shock, considering the disease's rarity and high fatality rate if not treated early. This work has been reported in line with the SCARE 2020 criteria [8].

#### Abbreviations

N/a.

# **Ethics** approval

Ethical approval was waived by the ethical committee of Mogadishu Somali Turkey, Recep Tayyip Erdogan Training and Research Hospital.

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#### Author contribution

Najib Mohamed Salad: Conceptualization, Data Curation, Visualisation, Investigation Writing, Original draft preparation, Abdikarin Ali Omar: Writing, Reviewing, and Editing, Yahye Garad Mohamed: Supervision, Validation.

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N/a.

# Guarantor

Najib Mohamed Salad.

#### Declaration of competing interest

This manuscript has not been submitted to, nor is it under review at,

#### N. Mohamed Salad et al.

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## Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.amsu.2022.103986.

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