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Emergency Surgery for Vaginal Evisceration – Case Report

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Abstract

Background: Vaginal evisceration referes to the protrusion of the small intestine through the vagina, typically ocurring after vaginal hysterectomy, and following sexual intercourse post-surgery. It is a very rare surgical emergency. A rupture on the vaginal wall allows the extrusion of the abdominal viscera, most commonly ileal loops. Preventing bowel ischaemia, necrosis, perforation and sepsis is paramount. The paper aims to present a rare case of trans-vaginal bowel evisceration that was treated with a combined abdominal and vaginal approach that required a segmental bowel resection and anastomosis, cul-de-sac repair, and colporraphy.

Case Report: The 59 year old female patient was transferred to the surgical department due to spontaneous trans-vaginal evisceration of bowel loops. She had a history of recurrent vaginosis for the last 2 months. A year earlier, she had undergone a vaginal hysterectomy for uterine prolapse. Following a rapid evaluation, the patient was urgently prepared for surgery. During a median laparotomy, after a difficult repositioning of the intestinal loops, they were found to be non-viable and were subsequently resected. The pelvic floor and vaginal defect were repaired both abdominally and via the trans-vaginal route. The patient had an uneventful postoperative course and was discharged in good health on the 7th day.

Conclusion: Trans-vaginal eventration of abdominal organs is a rare but potentially fatal

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complication of gynecologic procedures. The recognition of a real surgical emergency, efficient preoperative evaluation and management, and adequate intraoperative technique, coupled with a multidisciplinary approach, are associated with better outcomes.

Keywords: Emergency Surgery, Hysterectomy, Vaginal Evisceration, Pelvic Floor Disorders.

INTRODUCTION

The eventration of intestinal loops through the vagina is a very rare surgical condition. However, cases have been reported in the literature, most frequently in post-menopausal women who have undergone multiple vaginal interventions. Other cases involve a history of enterocele; a small bowel prolapse in the pelvic cavity (1). In the post-menopausal vagina, tissues are scarred and shortened, predisposing them to spontaneous rupture. Increased abdominal pressure and trauma are additional risk factors that can complicate an enterocele, inducing a rupture. Management of such cases consists of stabilization, fluid and electrolyte therapy, packing the bowel with moist saline gauzes, early administritation of antibiotics, plain radiographs to exclude foreign bodies, and emergency surgery (2)(7).

CASE PRESENTATION

History of the present illness and general assessment

A 59-year-old female patient was transferred to the Emergency Department of "Shefqet Ndroqi" University Hospital Tirana from her regional hospital, accompanied by medical staff. She complains of severe abdominal pain, profuse vomiting, and evisceration of abdominal organs through the vagina. Approximately four hours prior to her arrival, she experienced a sharp lower abdominal pain and observed the expulsion of internal organs after straining during a bowel movement.

Eleven months earlier, she had undergone a trans-vaginal hysterectomy for uterine prolapse. Over the past two months, she has been treated by her gynaecologist for recurrent vaginosis.

On objective examination, she lies supine and appears diaphoretic, pale, and in great distress, but fully conscious and oriented. Her heart rate was 98 BPM with rhythmic, normal heart sounds, and her blood pressure was 105/75 mmHg. On auscultation, she had normal breath sounds with a respiratory rate of 18 RPM. The abdomen was non-tender, with high-pitched bowel sounds. Extremities had a normal range of motion and pulse without oedema. Status localis: Visible evisceration of strangulated, ischaemic-to-gangrenous bowel loops from the vaginal orifice (Figure 1).

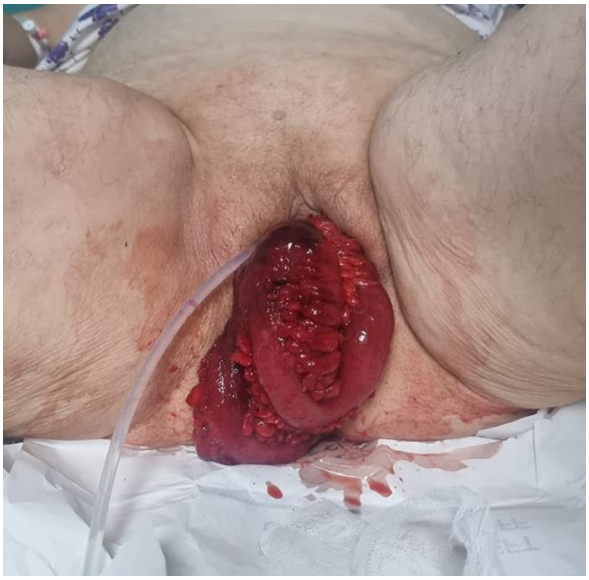

Figure 1. Trans-vaginal evisceration of strangulated bowel loops

Initial management

Two IV lines were established and necessary bloodwork was taken (hemogram, biochemical tests, arterial blood gases, prothrombin time and, INR, blood type, and Rh). For pain control, 5 mg of IV morphine and 500ml of Ringer's lactate solution was administered. A urinary catheter was inserted to reduce bladder pressure.

After an unsuccessful attempt to reduce the herniated viscera, they were covered with sterile gauzes moistened with normal saline. While waiting for a blood analysis report, an ECG, a cardiology consult, and an abdominal CT scan were completed to exclude other pathologies (Figure 2).

Blood tests revealed unremarkable findings, except for an elevated leucocyte count (13.9 K/uL).

The patient was thus urgently prepared for surgery.

Details of the surgical procedure

The procedure began with the patient under general endotracheal anaesthesia. A midline inferior incision was made to access the peritoneal cavity. We observed the protrusion of the bowel loops through the cul-de-sac, in a trans-vaginal defect. The incarceration was so severe that the intestines could not be pulled inside without an external push (Figure 3).

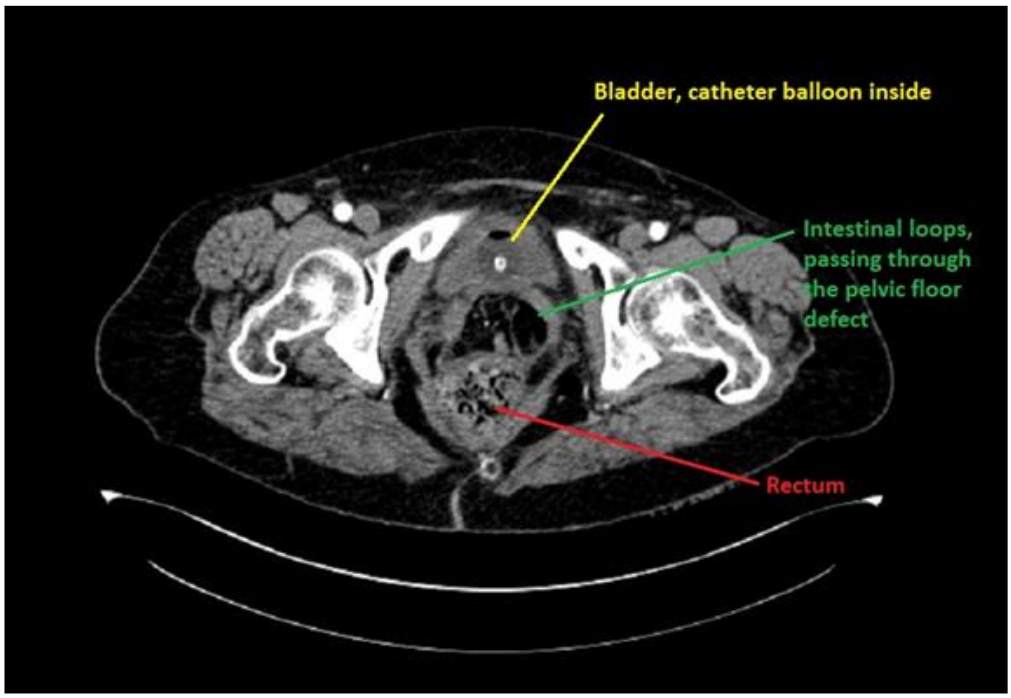

Figure 2. An axial image from the CT scan of abdomen

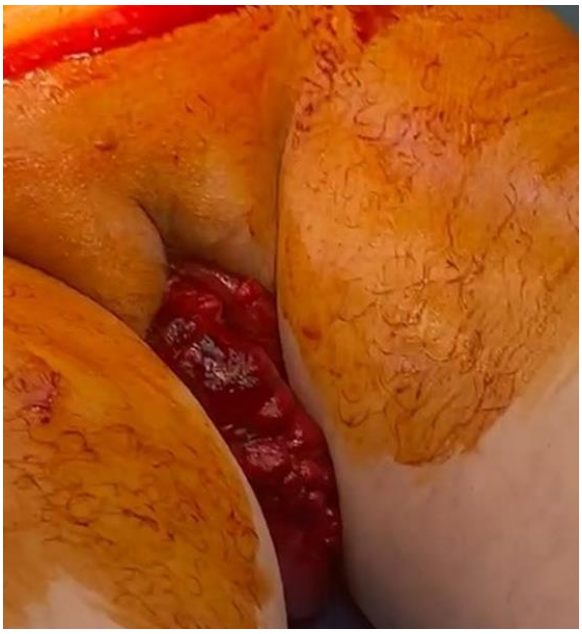

Figure 3. Preparing the operative field

After the loops were repositioned into the abdominal cavity, careful macroscopic examination revealed gangrene in a 70 cm segment of the ileum, located 30 cm distant from the ileo-caecal valve. The bowel was packed with moist gauze, and attention was redirected to the open defect. Following debridement of the edges of the vaginal apex laceration, the pelvic floor was repaired with the assistance of the gynaecological surgeon. Site-specific rraphy and cul-de-sac obliteration were performed.

Next, a segmental intestinal resection with subsequent two-layer end-to-end anastomosis was completed. The procedure concluded with a haemostasis check, normal saline lavage, placement of an abdominal drain, and wound closure.

Post-operative period

The patient followed an uneventful post-operative course. She remained afebrile for the whole duration of the hospital stay. She had her first bowel movement on the 4th day. The abdominal drain was removed on the 6th day. On the 7th post-operative day, after a normal abdominal ultrasonography result, the patient was discharged in good health. She was contacted periodically over the following two months and reported no specific complaints.

DISCUSSION

Vaginal evisceration, although exceedingly uncommon, is most frequently reported in postmenopausal women. Most have had a history of multiple vaginal operations or an enterocele (3)(4). In such cases, either the postmenopausal vagina is thin, scarred, and shortened, predisposing it to spontaneous rupture, or an already atrophic postmenopausal vagina is further stretched by an advancing enterocele, making it susceptible to rupture from increasing intra-abdominal pressure or trauma.

Emergency management consists of stabilization, fluid therapy, wrapping the bowel with moist saline sponges, early antibiotic therapy, radiographs to rule out foreign bodies, and prompt surgical intervention (5). The primary goal of the repair, whether by the abdominal or vaginal route, is to resect any non-viable bowel

and necrotic vaginal tissue, thoroughly irrigate the contaminated areas, and repair the vaginal rupture (6).

CONCLUSION

Trans-vaginal eventration of abdominal organs is a rare but potentially fatal complication of gynaecological procedures. It poses a challenge for the surgical team, which requires attentiveness, competence, and the assistance of different specialties.

The recognition of a real surgical emergency, efficient preoperative evaluation and management, and adequate intraoperative technique, coupled with a multidisciplinary approach are associated with better outcomes.

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Conflict of Interest Statement: The author declares that have no conflict of interest.

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