SPONTANEOUS TRANSVAGINAL INTESTINAL EVISCERATION IN AN ELDERLY WOMAN

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ABSTRACT

Introduction: **Transvaginal intestinal evisceration is a rare surgical emergency that is associated with morbidity and mortality. Only a few cases of transvaginal evisceration have so far been described. The predisposing risk factors associated with this clinical condition are multifactorial.**

Case presentation: **We report a case of an 85-year-old female that presented with spontaneous small bowel evisceration through the vagina. The loops of the small bowel appeared edematous and thickened but there was demonstrable visible peristalsis. She had no previous laparotomy or vaginal surgery. An emergency laparotomy was performed, and the small bowel was reduced into the abdomen through the vaginal defect. Afterward, a total abdominal hysterectomy was performed with the closure of the vaginal vault. The postoperative period was uneventful.**

Conclusion: **The spontaneous evisceration of bowel loops can be successfully managed when patients with such cases present early and promptly managed. Prompt diagnosis and surgical management are crucial to prevent complications. If the eviscerated viscera are non-viable, resection and restoration of bowel continuity are imperative. Management should be individualized and multidisciplinary.**

INTRODUCTION

Transvaginal intestinal evisceration is quite rare and has potentially fatal complications[1-5]. It occurs more often in elderly postmenopausal women than in younger women[1,3,6]. Some of the risk factors associated with transvaginal intestinal evisceration include menopause, coital or obstetric trauma, previous vaginal surgery, presence of enterocele, uterovaginal prolapse, and ageing[5-8]. Previous gynaecologic surgery accounts for most cases of transvaginal bowel evisceration[1,5-7,9-11]. We report the case of an elderly woman that presented with spontaneous transvaginal intestinal evisceration without any history of gynaecologic surgery.

CASE PRESENTATION

An 85-year-old woman presented to the Emergency Department (ED) with spontaneous evisceration of the small intestine through her vagina. About 12 hours prior to presentation to the ED, she noticed progressive

Figure 1

protrusion of bowel through her vagina while squatting to urinate. There was associated lower abdominal pain. She had spontaneous vaginal deliveries of five children and her last confinement was 40 years ago. The woman has been menopausal for nearly 30 years. She had a history of reducible vaginal prolapse following her last childbirth, but she never sought medical attention. At the ED, she was in significant discomfort and her vital signs were: pulse rate of 110/min, blood pressure of 90/60mmHg, respiratory rate of 30 cycles/min and temperature of 36.2ÚC. Examination revealed a scaphoid non-tender abdomen. On examination of the perineum, there was evisceration of about 200cm of small intestine with mesentery through the vaginal opening. The small bowel appeared edematous with demonstrable visible peristaltic movements (Fig. 1). Anal and rectal examinations were normal. Blood count and chemistry revealed leucocytosis of 28.19 × 10^9 cells/L with a preponderance of neutrophils (91.4%), and acidosis (HCO*f* of 18mmol/L).

was performed. The herniating loops of small bowel were reduced trans-abdominally by gentle traction. The entire length of small bowel was inspected and appeared viable. There was a 6cm linear defect on the posterior vagina fornix with necrotic edges (Fig. 2). The Gynaecology team performed total abdominal hysterectomy, bilateral salpingo-ophorectomy and repaired the vagina vault using continuous stitches with No 2 vicryl suture.

She recovered well from surgery, and was discharged on the 5th day of admission and to follow-up in the outpatient surgical and gynaecological clinics.

DISCUSSION

The earliest description of transvaginal evisceration was by Hyernaux in 1864[12]. Since then, only a few more cases have been reported, and most patients with transvaginal evisceration are post-menopausal women.[1,3,6] It is plausible that vaginal wall atrophy, due

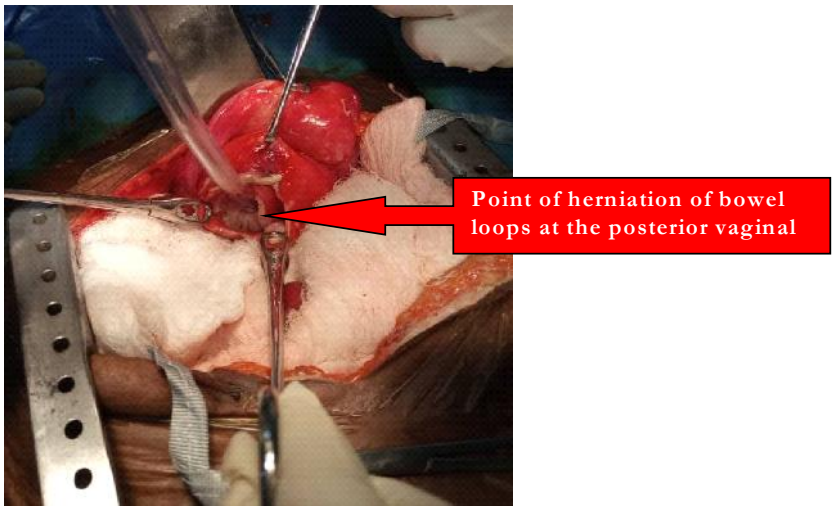

Figure 2

She was commenced on intravenous fluid resuscitation with ringers lactate alternating with dextrose saline infusion while on Nil per Oris. Blood samples were withdrawn for baseline investigations, and empirical broad-spectrum antibiotics (ceftriaxone and metronidazole) were commenced. Sterile gauze soaked in warm normal saline was used to wrap the loops of small bowel. An informed consent was obtained after counselling her on the mode of treatment. She was taken to the operating room by the General Surgery team, in conjunction with the Gynaecology team. The patient was placed in supine position, and before skin preparation the eviscerated loops of bowel were washed with warm saline and wrapped in another saline soaked gauze. Subsequently, general anaesthesia was administered, the abdominal skin was prepped and isolated by surgical drapes, and low midline laparotomy

to hypoestrogenism and pelvic floor weakness could be the risk factor for spontaneous evisceration following a raised intraabdominal pressure.[4,13,14]

Most patients with transvaginal evisceration have previous gynaecological surgery or concomitant pelvic organ prolapse[1,6]. Our patient was a postmenopausal woman with a history of uterovaginal prolapse, which may have predisposed her to a weakened vagina wall. However, there was no significant event triggering the rupture of her vagina vault which led to the transvaginal evisceration of the small intestine. Transvaginal small bowel evisceration is associated with 6-8% mortality and a high morbidity rate (15-20%).[1,7,10,11,13]

Complications associated with this condition include bowel strangulation, peritonitis, and deep vein thrombosis[3,7,11]. Early recognition and surgical treatment remain the main choice to avoid complications. The rareness of this condition has not afforded a unified consensus on an optimal line of management[7,10]. The surgical management should be on a case-by-case basis and performed by a multidisciplinary team. However, four important points that may assist in the acute management of vaginal rupture and evisceration are: fluid resuscitation; preserving the bowel in a moist saline wrap; administering broad spectrum antibiotics to cover gastrointestinal and perineal flora, and initiating immediate surgical repair[10,11,14]. Surgical options include a combined laparoscopic and vaginal approach to enable appropriate inspection of the abdominopelvic viscera before repairing the vaginal defect, and laparotomy combined with a transabdominal or transvaginal vault repair[1,9-11]. The intra operative management of transvaginal intestinal evisceration should start with a detailed evaluation of the eviscerated bowel. Ischaemic, non-viable bowel would require resection and anastomosis[1,7-9]. In our case, after transabdominal reduction, the eviscerated small intestine was found viable across its whole length, and hysterectomy and vaginal closure was performed due to uterovaginal prolapse.

CONCLUSION

Transvaginal bowel evisceration is a rare emergency. Our patient had a history of uterovaginal prolapse which if had been treated earlier may have prevented transvaginal evisceration. Nevertheless, prompt diagnosis and management of transvaginal evisceration is key to preventing intestinal strangulation and attendant morbidity and mortality. The eviscerated bowel must be kept wrapped in saline soaked gauze prior to surgical intervention. This was instituted at the ED on presentation of our patient after 12 hours of evisceration, and the bowel loops were still preserved at surgery. The bowel loops could have been strangulated within the 12 hours of delay and would have required resection of the affected segment. Management of transvaginal bowel evisceration should be multidisciplinary as seen in this case, the general surgeon and gynaecologist should be involved early in the management of the patient.

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