# Spontaneous Vaginal Evisceration with Small Bowel Infarction

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Abstract: We report a case of a 72 year old woman who presented with small bowel infarction following a spontaneous vaginal evisceration and vaginal vault prolapse.

The bowel infarction was managed by small bowel resection and anastomosis, and the vaginal evisceration was repaired vaginally.

Keywords: Vaginal evisceration, Small bowel infarction.

## INTRODUCTION

Spontaneous evisceration through the vagina is a medical emergency that requires prompt recognition and immediate surgical intervention. To date, only eighty-five cases of bowel evisceration have been documented worldwide [1, 2].

The primary risk factors for spontaneous evisceration for premenopausal women include trauma due to coitus, rape, obstetrics procedures or foreign body insertion and postmenopausal women risks are previous vaginal surgery, presence of eneterocele, multiparae, and older age [2-5]. In postmenopausal women, transvaginal evisceration is frequently associated with increased abdominal pressure, vaginal ulceration due to severe atrophy, and straining at stool. [2-5].

The associated mortality rate is 5.6%, however the incidence of morbidity is higher when bowel has become strangulated through the vaginal defect [2, 6].

#### **CASE REPORT**

A 72 year old Para two presented to the emergency room 6 hours after a acute onset of severe left lower quadrant pain which was associated with small bowel herniation through the vagina. She reports nausea but denies vomiting fever or chills.

Her past medical history includes diabetes and hypertension. Her past surgical history includes a vaginal hysterectomy with anterior repair 3 years ago for symptomatic pelvic organ prolapse and is currently being evaluated for vault prolapse in anticipation of a laparoscopic sacrocolpopexy. She has a remote history of smoking. She is not sexually active and denies any trauma to the vagina.

Physical examination findings include a lady in pain, vital signs: temperature 98.7 degrees Fahrenheit, blood pressure 158/81, pulse rate of 115, respiratory rate 18 and oxygen saturation 93% on room air.

Abdominal examination findings were a distended abdomen, left lower quadrant tenderness, no rebound tenderness or guarding. Pelvic examination findings include 20 cm infarcted segment of small bowel with mesentery herniating through a 4 cm right vaginal wall evisceration, complete vaginal vault prolapse Figure **1**.



Figure 1: Prolapsed vaginal vault with evisceration of infarcted loops of small bowel.

After resuscitation with IV fluids, she received IV antibiotics (1 g of Cefoxitin and 500 mg Metronidazole) and her bowel wrapped with warm, sterile, and saline soaked gauze for transfer to the operating room.

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A general surgeon consult was obtained. Then, under anesthesia, the patient was placed in the dorsal lithotomy position to allow for assessment of her small bowel for viability. The infarcted bowel was edematous, thick walled, non-viable and all attempts to transvaginally reduce the small bowel into the peritoneal cavity was unsuccessful. A midline vertical midline incision was made and the 20 cm infarcted bowel was resected transvaginally. The remaining portion of the small bowel was returned into the peritoneal cavity and a side to side anastomosis was performed. The 4 cm vaginal defect was repaired vaginally with interrupted sutures of 0'vicryl. Broad spectrum antibiotics were given postoperatively for 48 hours. Follow up are at 6 weeks was normal. Subsequently she recently underwent a total colpocleisis to correct her vault prolapsed.

### DISCUSSION

Transvaginal bowel evisceration is a rare, lifethreatening event that requires immediate surgical intervention. It commonly occurs in premenopausal women after vaginal trauma induced by coitus, rape, obstetric procedures and insertion of foreign bodies and postmenopausal women risks are older age, previous pelvic surgery, enterocele repair, a sudden increase in intra-abdominal pressure (straining, coughing, defecating and medical conditions which inadequate predispose to wound healing[2-5]. Transvaginal bowel evisceration is more commonly seen in elderly postmenopausal women [3]. This may be attributed to the fact that postmenopausal vaginal walls are thin, scarred and shortened with diminished.

vascularity which makes them more prone to rupture [7] Other risk factors include history of irradiation, abdominal or vaginal hysterectomy, perineal.

Proctectomy and is rarely known to occur spontaneously [2,3,5,8-10]. Spontaneous rupture typically occurs in the posterior fornix [4]. In our case, the contributing factors to her evisceration include the fact that she is postmenopausal woman with a previous history of pelvic surgery which may have weakened her pelvic floor and consequently contributed to the vaginal rupture.

Transvaginal bowel evisceration is a surgical emergency with a mortality rate of 5.6 % attributed mainly to septicemia and thromboembolism [3]. Other known complications of bowel evisceration include bowel infarction, infection, ileus and deep vein thrombosis. Early recognition and urgent surgical repair is imperative for adequate management. Emergency management consists of stabilization of the patient, intravenous fluid replacement, cleaning and packing the bowel with moist saline sponges, early prophylactic antibiotic cover and immediate surgical repair. Surgical management requires a midline laparotomy incision through which bowel is retrieved into the abdomen and non-viable segment is excised and re-anastomosis performed. Definitive treatment of transvaginal bowel evisceration is achieved by correction of the pelvic floor defect by pelvic floor enforcement at the time of initial surgery. In our case the 20 cm segment of infarcted bowel in the vagina was so edematous, the resection of bowel was performed vaginally and anastomosis intraabdominally. The vaginal defect was corrected vaginally with interrupted absorbable sutures. A total colpocleisis was performed 3 months later after the index repair to correct her vault prolapse and to prevent a future recurrence. To date, all reported cases that have required bowel resection have been managed with exploratory laparotomy followed by repair of the vaginal defect [2, 7].

Kowalski *et al.* describe principles to prevent such a dreaded condition and include: restoration of the normal vaginal axis, anastomosis of the stumps of the supporting ligaments of the pelvis to the angles of the vagina, preservation of vaginal length and maintenance of vaginal intergrity with application of estrogen if necessary.

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