Introduction

Spontaneous small bowel evisceration through vagina was primarily described in 1907 by McGregor [1]. It is an extremely rare condition to occur. There are very few cases have been reported all over. Various risk factors like older age [2,3], post-menopausal status [1,3-7], trauma, vaginal surgeries [1,8-10] leads to such pathological condition. It is a surgical emergency which requires urgent intervention [1].

Such condition is mainly associated with the increase in abdominal pressure [1]. The mortality and morbidity is high once the strangulation of bowel occurs [3,8].

Here, we report a 57 year post-menopausal female patient brought to emergency department with evisceration of small bowel loops through vagina with uterine prolapse.

Case report

A 57 years old alone female brought to the emergency department by 108 emergency services. She had complains of severe continuous pain in lower abdomen with an irreducible mass protruding per vaginally for past 12 hours. Patient was brought to the emergency department in alone condition. No significant past history was elicitable due to lack of recalling from her. The small bowel loops were put back into abdominal cavity by laparotomy and the pelvic floor defect was sutured per vaginally with correction of uterine prolapse. The postoperative recovery was uneventful.

There were approximately 25 centimeter of small bowel found protruding through vaginal introitus with uterine prolapse. There were multiple irregular ulcers present over the prolapsed uterus.

The eviscerated bowel loops were congested and edematous. It was reddish in color. There was approximately five centimeter defect was identified in the pelvic floor which was communicating with the peritoneal cavity. Attempt to push back the eviscerated small bowel from the defect was made but it was unsuccessful. Thereafter the decision to do laparotomy and pull back the eviscerated small bowel into peritoneal cavity was made with correction of the prolapsed uterus and closure of pelvic floor defect.

On laparotomy, the eviscerated bowels were found to be distal jejunum and proximal ileum. The bowels were edematous, congested and found to be viable after reduction into peritoneal cavity. Rest of the bowel was normal and no other abnormality found.

For the prolapsed uterus the decision to do total vaginal hysterectomy was made on basis of patient’s age and condition of pelvic floor and uterus condition.
There was approximately five centimeter size pelvic floor defect found from which the small bowel had eviscerated. The defect was repaired per vaginally with continuous interlocking polyglactine suture material.

There was one drain kept in left pelvis and vertical midline laparotomy incision was sutured in layers. Post operatively patient was kept in observation in intensive care unit for five days and thereafter in general ward. Post-operative recovery was uneventful. On 11th post-operative day total laparotomy suture removal was done.

Discussion

Transvaginal bowel evisceration is rare, life threatening situation needs immediate attention.as reviewed by Kowalski et al. it is more commonly seen in post-menopausal women [2]. This may be attributed to the fact that post-menopausal vaginal wall is thin, scared and shortened with diminished vascularity. All these factors make it more prone to rupture [4].

In premenopausal women the risk factors are trauma due to coitus, rape, obstetric procedures or foreign body insertion.in post-menopausal women risk factors are older age, previous vaginal surgery, any condition leading to increase in abdominal pressure. Spontaneous rupture is commonly occurs at the posterior fornix [5].

Bowel evisceration is a grave surgical emergency. The mortality reported with this condition is 6-10% which is attributed mainly due to septicemia and thromboembolism. Bowel infarction, infection, ileus and deep vein thrombosis are identified complications of transvaginal bowel evisceration. Early recognition and urgent surgical intervention is necessary for proper management [2,3,5,6].
Emergency management of bowel evisceration consist of stabilization of the patient, intravenous fluid therapy, packing the bowel with moist saline sponges, prophylactic antibiotic coverage and immediate surgical intervention and controlling hemorrhage with vaginal packs [4].

Nichols and Randall suggested that delayed evaluation of the pelvic support followed by appropriate repair is preferable to immediate repair [10]. There is also a mention in one of the Cases where it was advised to leave the defect open for secondary suturing transvaginally if the edges are not healthy enough to support healing [8]. The principles involved in prevention of such a dreaded condition include:

- Restoration of vaginal axis
- Anastomosis of the stumps of the supporting ligaments of the pelvis to the angles of the vagina
- Preservation of vaginal length
- Maintenance of vaginal integrity with application of oestrogen [2].

Of all the cases of vaginal evisceration reported in the literature to date [8], 50-75 percent of the patients had undergone one or more previous vaginal operations [3,8] and roughly 25 percent of the eviscerations occurred after abdominal hysterectomy [1]. In these cases, laparotomy is necessary to access the defect, reduce the bowel into the abdomen, and resect any nonviable bowel [11]. A combined abdominal and vaginal approach, which is used in the case, is recommended for adequate evaluation and effective repair [12].

**Conclusion**

The take home message from this emergency condition is to do as early as possible surgical intervention. Earliest surgical intervention decides the mortality and morbidity of patient. The viability of the bowel loops after evisceration is meticulously checked to prevent bowel resection and anastomosis related complications.

**References**