

# Enterocoele in a perfectly healthy 59-year old woman: a case report

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**Abstract:** An enterocoele is a loss of vaginal connection to the endopelvic fascia, but it could also be due to congenital defects in the vaginal support, increased intra-abdominal pressure or a wider levator hiatus. This is a clinical presentation of a 59-year old African American woman with no significant past medical history who developed a vaginal enterocoele. An exploratory laparotomy was performed and there was a ruptured area approximately 3 cm in size in the posterior cul-de-sac. The remainder of the vagina showed no evidence of any traumatic entry, bruising or hematomas; thus, the prolapsed bowel was reduced back into the abdominal cavity and the defect was repaired. The patient has no previous history of abdominal or pelvic surgeries, no evidence of malignancy seen during the surgery and denied any recent trauma; based on these factors, it still remains a mystery as to why she developed a vaginal enterocoele.

**Key words:** Enterocoele; Bowel prolapse; Pelvic organ prolapse; Pelvic reconstruction; Pessary use; Endopelvic fascia; Vaginal support.

## CASE PRESENTATION

A 59 year old, African-American woman was admitted to the emergency room, following the development of sudden lower abdominal pain and vaginal bleeding. She is post menopausal and has not had any vaginal bleeding for 10 years. The pain had become progressively worse and is sharp and constant. Patient denies any recent vaginal trauma. Her last sexual intercourse was 2 weeks prior, after which she had no discomfort or vaginal bleeding. She does not have a history of any abdominal or gynecological surgeries. Approximately 2 feet of the small bowel with no evidence of ischemic change had prolapsed out through her vaginal opening (Figure 1). An exploratory laparotomy was performed and there was a ruptured area approximately 3 cm in size in the posterior cul-de-sac. The remainder of the vagina showed no evidence of any traumatic entry, bruising or hematomas. Thus, the prolapsed bowel was reduced back into the abdominal cavity and the defect was repaired. Postoperatively, patient tolerated procedure well and is in stable condition. She has a nasogastric tube placed, continued on IV antibiotics as a precaution to prevent sepsis and anticoagulants for DVT prophylaxis.

## DISCUSSION

Nichols and Randall defined enterocoele as a lost of vaginal connection to the endopelvic fascia.<sup>1</sup> Others argue that it could be due to congenital defects in the vaginal support, increased intra-abdominal pressure or a wider levator hiatus.<sup>2</sup> According to research, an enterocoele can develop due to a significant decrease in the mitochondrial DNA in uterosacral ligaments, as well as, an increase in the rate of apoptosis in women who are suffering from pelvic organ prolapse.<sup>3,4</sup> It was found in one study that women that are older, menopausal and had prior pelvic surgeries are more prone to developing an enterocoele.<sup>5</sup> Among these factors however, age is only independently associated with enterocoele.<sup>5</sup> Conservative measures such as pessary use are recommended for patients who are unfit candidates for surgery.<sup>6</sup> Otherwise, patients can undergo reconstructive surgeries where they aim to restore normal anatomy and integrity of the endopelvic fascia and its vaginal support.<sup>7</sup>



Figure 1. – A loop of small intestine prolapsed through the vagina.

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