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Late Vaginal Cuff Dehisence and Evisceration After Prolapse Surgery: Case Report

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Abstract **Case Report**

Introduction: Vaginal cuff dehiscence (VCD) is rare and may be associated with evisceration of the small bowel. It's a rare life-threatening condition that is usually seen in postmenopausal women with past history of gynecological surgery. ***Presentation of Case:*** A 55-year-old woman presented with sudden-onset abdominal pain and protrusion of a mass through the vagina without triggering factor after two years of a reconstructive prolapse surgery. Physical examination revealed small bowel in the vagina. Laparotomy was performed and the vagina closed. post-op wall sepsis has been controlled. ***Discussion:*** Less than 200 cases of VCD have been reported. Most often this event this event occurs acutely; sometimes a triggering factor is found, the most important risk factor being a history of total hysterectomy. Diagnosis is easy Immediate surgery is necessary to reduce the risk of intestinal ischemia and necrosis. ***Conclusion:*** VCD must be suspected in any woman with surgical history of total hysterectomy presenting with sudden-onset abdominal/ pelvic pain or swelling. Emergency surgery is necessary to avoid complications which can be serious.

Keywords: Caginal cuff dehiscence, evisceration.

1. INTRODUCTION

Vaginal cuff dehiscence (VCD), is defined as the partial or complete separation of the vaginal vault, and may be associated with an evisceration; usually of the small intestine.

This is a rare, life-threatening disease for which rapid diagnosis and treatment are essential. The most important risk factor is a history of total hysterectomy, whatever the approach in this article, we will present a case of vaginal cuff dehiscence and intestinal evisceration following a reconstructive prolapse surgery (including hysterectomy) with native tissue two years earlier.

2. CASE REPORT

A 55 -year-old woman presented to the emergency department with sudden spontaneous -onset of transvaginal mass protrusion when urinating accompanied by pelvic pain. There were no relieving or aggravating factors.

The patient has no previous medical history. She had undergone a reconstructive prolapse surgery with native tissue: multicompartment pelvic organ prolapse procedure by vaginal approach with unilateral posterior Richter sacrospinous fixation for a stage 4 pelvic organ prolapse (Baden Walker classification and POP-Q classification)2 years earlier (Fig1).

Physical examination found a conscious alerted patient. No fever noted and vital signs were stable and the abdomen was soft.

Vaginal examination revealed a 40 cm intestinal loop protruding from a 5 cm vaginal defect, no vaginal discharge was noted. The bowel looks congestive as the incident occurred 6 hours earlier. (Fig 2).

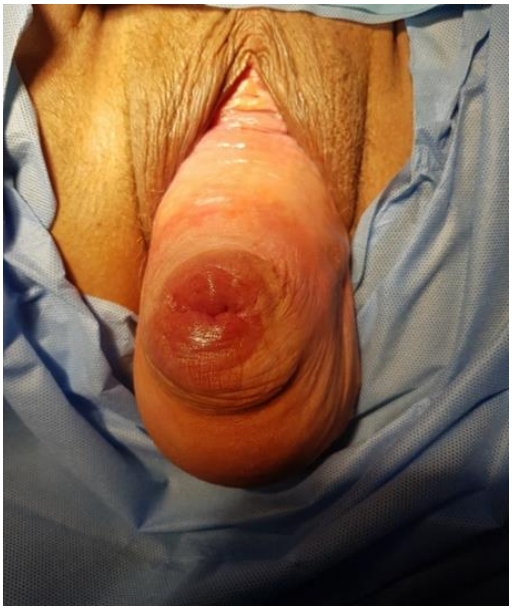

FIG 1: STAGE 4 POP-Q

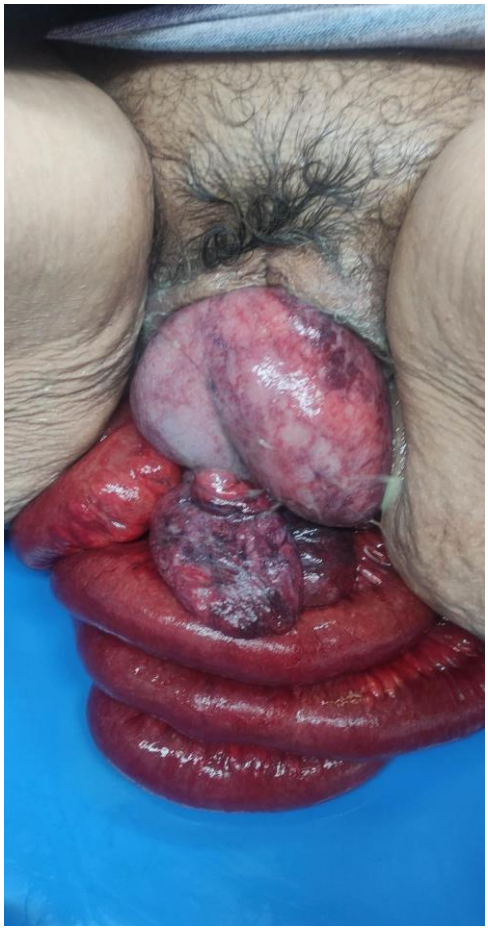

Fig 2: Vaginal dehiscence and small Bowel evisceration

Apart from a standard preoperative blood test, no other complementary examinations or imaging were requested.

the patient was taken directly to the operating room, Laparotomy was performed through a subumbilical midline incision. after reintegration of the intestines into the abdominal cavity via a double route: their examination from the duodenojejunal junction to the ileocecal valve, looked healthy, with progressive recoloration and renewed peristalsis.

We performed a partial colpectomy of excess necrotic tissue and closure of the vaginal dome with

Vicryl [1] in separate stitches (Fig3). The abdominal cavity was washed abundantly with saline. The post-operative course was marked by a controlled abdominal wall sepsis. And the follow-up to date found a recurrence of the vaullt prolapse.

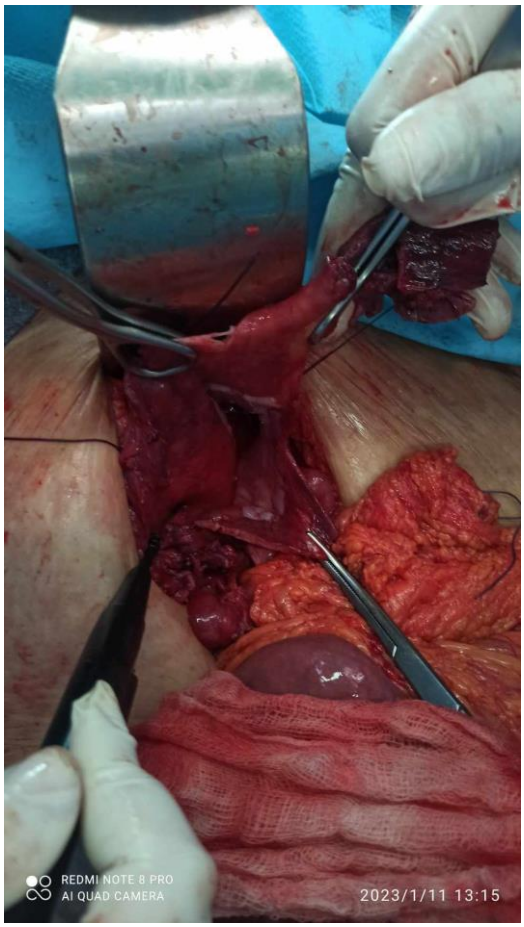

Fig-3: Colpectomy and vaginal Closure

3. DISCUSSION

Vaginal cuff dehiscence (VCD) and Vaginal cuff dehiscence with evisceration (VCDE) are potentially life-threatening condition.

Vaginal Cuff dehiscence (VCD) is a disruption in the vaginal vault or apex. While vaginal cuff dehiscence with evisceration is complicated with the extrusion of intra peritoneal content through the open vagina.

Transvaginal small bowel evisceration being the most widely reported in the literature.

the first reported cases are those of Hyernaux in 1864 [1] and Mc Gregor in 1907 [2]. since then, fewer than 200 cases have been reported as isolated events.

Seldom described after radical cystectomy [3], conization [4], Some rare cases are post-coitus induced [5], others occurred after obstetric trauma or dilatation and curettage [6-7], but most often after total hysterectomy, whatever the approach [8].

the literature is discordant when it comes to the relationship between the hysterectomy route and the incidence of vaginal dehiscence. Most studies showed a statistically significant higher incidence of VCD in RATLC and TLH compared to both TAH and VH [9-10]: this could be linked to either the use of electrosurgery or to the quicker recovery associated with a laparoscopic approach, which would allow a quick return to daily activities, including sexual intercourse, but others did not find a significative difference [11]. It should be noted that in this study TLH represented 3.5% of the cases.

This study also compared vaginal cuff left open vs. closing of the vaginal cuff, and found no statistical difference in dehiscence rates.

For the closure of the vaginal cuff Only two effective strategies have been identified in reducing the risk for this complication: the use of barbed sutures in robotic surgery and the adoption of a laparoscopic approach instead of vaginal one to close the vaginal cuff. When restricting the analysis only to laparoscopic cases,

the use of barbed sutures does not protect against vaginal cuff separation [12].

Among risk factors: the weakening of vaginal tissue which may be innate; as in the case of our patient with an abnormally advanced prolapse for her age, or caused by genital atrophies and enteroceles; the risk of spontaneous evisceration is increased in postmenopausal women [13]. Some factors affect vaginal cuff wound healing; operative technique, cuff complications such as infection, abscess, or hematoma, Medication exposures (corticosteroids-Chemotherapy), malignancy, radiotherapy, vaginal atrophy, and pelvic organ prolapse (POP).

evisceration can occur either spontaneously or, in connection with an increase in intra-abdominal pressure induced by coughing, defecating, or falling. Sometimes it's caused by vaginal trauma caused by coitus, obstetric instrumentation, or biopsy [14-16].

The time of occurrence varied significantly, it may be immediately traumatic dehiscence or more than 20 years [17].

Vaginal evisceration is a surgical emergency, and early recognition and surgical repair are crucial for its successful management; preventing further complications; such as infection, hemorrhage, and bowel's ischemia and injury.

Vaginal cuff dehiscence can be repaired vaginally, abdominally, laparoscopically, or through a combined approach However, there is currently no standard recommendation since no single method demonstrates superiority [18].

transvaginal approach should be used only if the patient is medically stable and has no clinical evidence of peritonitis or bowel ischemia.

If the intestinal segment is very important with a high risk of strangulation and ischemia the abdomen, and intestinal segments should be evaluated carefully for ischemia for thus laparotomy is chosen.

In Recurrent vault dehiscence is a very rare situation and the use of polypropylene mesh and sacro-colpopexy should be considered in this situation [19].

4. CONCLUSION

If everyone agrees on the imperative need for rapid diagnosis and surgical management of vaginal scar dehiscence, especially when complicated by evisceration.

the small number of cases reported makes it impossible to draw any conclusions as to the approach and sutures to be used to avoid this situation.

Patient-specific factors, menopausal status and cause of operation, may influence the timing and severity of vaginal cuff dehiscence.

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