# Post - Coital Vaginal Evisceration Following 8 Years in a Patient was Operated for Endometrium Cancer: Report of a Case and Review of the Literature

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Intestinal prolapse through vagina following hysterectomy secondary coitus is rare. It is generally seen in postmenopausal women after vaginal hysterectomy or multiple surgeries performed for pelvic floor disorders. However, in English literature, there are only a few cases of vaginal evisceration after radical hysterectomy and pelvic lymphadenectomy, but all of these cases were cervical cancer. We report a case of a 49-year old woman presenting with evisceration of the small bowel from the vagina eight years after total abdominal hysterectomy (TAH), bilateral salpingoopherectomy (BSO) and pelvic-paraaortic lymphadenectomy for stage Ib endometrioid type endometrial cancer.

Key Words: Vaginal evisseration, Post-coital, Endometrium cancer

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#### Introduction

Intestinal prolapse through vagina following hysterectomy secondary coitus is rare.1 It is generally seen in postmenopausal women after vaginal hysterectomy or multiple surgeries performed for pelvic floor disorders.<sup>2</sup> However, in English literature, there are only a few cases of vaginal evisceration after radical hysterectomy and pelvic lymphadenectomy, but all of these cases were cervical cancer.<sup>3</sup> We report a case of a 49-year old woman presenting with evisceration of the small bowel from the vagina eight years after total abdominal hysterectomy (TAH), bilateral salpingoopherectomy (BSO) and pelvic-paraaortic lymphadenectomy for stage Ib endometrioid type endometrial cancer.

# **Case Report**

A 49-year old woman was admitted to our department with complaints of acut onset severely abdominal pain, vaginal spotting and feeling of fullness between her legs during the sexual intercouse. She denied any instrumentation or unusual,

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aggressive sexual intercouse. She underwent a TAH, BSO and bilateral pelvic-paraaortic lymphadenectomy for stage 1b endometrium cancer eight years ago. Hysterectomy, was uncomplicated, vaginal cuff was closed with interrupted 1-0 Vicryl sutures and retroperitoneum was left open. The postoperative course was uneventful and after the final pathologic reports she received conventional adjuvant radiotherapy. At the follow-up visits, the vaginal cuff was completely healed and she had no complaints and recurrence was not seen.

Upon admission, her condition was stable. Abdominal examination was not abnormal. Speculum examination revealed that multiple loops of prolapsing small bowel filled to the vagina, with no evidence of ischemia, strangulation or laceration, through a 4-5 cm transverse defect in posterior side of vaginal vault. There was no active vaginal bleeding. The prolapsed loops was covered with warm saline pads. Blood cell count, biochemical investigations and plain x-ray of the abdomen were within normal limits. Immediately, the patient was taken to operating room where she was placed in the lithotomy position. In the Trendelenburg position, after the manually replacement of the loops of small bowel, defect of the vaginal vault was repaired with 1-0 Vicryl interrupted sutures and multiple biopsies were taken from defect line. Before the repairment, broad spectrum prophylactic antibiotics therapy was given. The postoperative course was uneventful and the patient was discharged two days after surgery. Histologic examination of the vaginal vault biopsy was not revealed a evidence of malignancy. During 8-week follow-up the patient was asymptomatic and final examination showed a fully healed vaginal scar.

## **Discussion**

Vaginal evisceration is a rare condition. Since the first report of vaginal evisceration by Hyernaux in 1864, approximately 100 cases of evisceration following hysterectomy have been reported to date but there are only four cases after radical hysterectomy and all of these were cervical cancer.<sup>2</sup> This is first reported case of vaginal evisceration seen after abdominal hysterectomy for endometrium cancer. The overall incidence of post-operative vaginal evisceration is unknown. Recently, in a review of the largest series reporting from a single institude, Croak et al. Determined the rate of vaginal evisceration as 0.032%, among all hysterectomies and pelvic repair procedures.4 Subsequently, at the largest published retrospective study, Hur et al. reported a 0.09% incidence of vaginal evisceration following hysterectomy.5 Kowalski et al reported that postmenopausal women constituted 60% of all cases.6 In various studies, it has been noted that interval between hysterectomy and evisceration has a wide range from 1 day to 30 years, review of literature revealed a mean of 34 months and a median of 10.5 months.7 In this report, this time is eight years.

The etiology of vaginal evisceration is not clear and there appears to be some differences between pre-and postmenopausal women. Somkuti et al. described various risk factors for vaginal evisceration after hysterectomy, such as advanced age, poor sugical technique, postoperative vaginal cuff infection, wound hematoma, coitus before healing, trauma, previous radiotherapy and chronic steroid administration. In premenopausal women, it has been suggested that sexual intercouse is most frequently etiological factor associated with vaginal evisceration. 4 However, in the postmenopausal population, it is commonly associated with vaginal atrophy, chronic pelvic prolapse and prior prolapse surgery.4 Also, it has been reported that presence of enterocele increased the risk of vaginal rupture in this population.<sup>6</sup> It is important note that although in the elderly women the evisceration was considered a spontaneous event, coitus may cause rupture in this patients. Like our case, in cases occurring long after hysterectomy, alteration of the position of the vaginal apex and/or its shortening were considered to be important a mechanism.7 In our case, another predisposing factor for vaginal evisceration is prior radiotherapy. The pathophysiology of evisceration following adjuvant radiotherapy is progressive obliterative endarteritis resulting to hypovascular, hypoxic and hypocellular a tissue.3

The route of the hysterectomy as a major risk factor was evaluated for this complication. In a review reported by Ramirez et al., it was indicated that vaginal evisceration was more frequently seen in patients who underwent vaginal hysterectomy compared to those of abdominal or laparoscopic

hysterectomy.2 However, following this, Iaco et al. noted that surgical route did not impact the evisceration rate.8 Nezhat et al. presented first cases of vaginal rupture after laparoscopic hysterectomy and they suggested that laparoscopic hysterectomy is associated with an increased risk of this complication.9 Following publication of Hur et al. supported this idea.<sup>5</sup> Likewise, for long years, there were discussions regarding to hysterectomy technique for vaginal cuff closure, such as open technique, vagina was left open while peritoneal defect was sutured carefully, or technique of leaving the peritoneal defect open and suturing the vaginal cuff with continously or interrupted suture. Although there are studies of indicating less morbidity related to open technique, recently, Iaco et al. showed that two techniques have similar efficacy in preserving vaginal evisceration.8

Vaginal evisceration is commonly associated with nonspecific symptoms such as sudden pelvic or vaginal pain, vaginal spotting and/or discharge, a protruding mass from vagina and sensation of a mass within the vagina or between the legs. The terminal ileum is the organ most frequently prolapsed, although other organs, such as the omentum, salpinx and epiploic appendices, have been described.<sup>1,10</sup>

The management of vaginal evisceration necessitates promptly intervention. It consist of stabilization, wrapping the prolapsed bowel with moist saline sponges, fluid therapy, early antibiotic therapy, radiographs to rule out foreign bodies and immediately surgical approach. At the management, It is cornerstone to expose the vaginal defect, asses bowel viability and exclude bowel injury. Irrespective of the route, abdominal and/or vaginal, the primary aim of surgical intervention is to resect the non-viable bowel and necrotic vaginal wall, irrigation of the contaminated areas and repair the vaginal defect. If the vital signs and abdominal findings are stable and the ability to reduce the prolapsed bowel transvaginal approach may be choice. Otherwise, abdominal exploration should be done. In elderly patiens whose sexual function is not issue, colpocleisis has been proposed.4 Very rarely recurrences can be seen in this cases.

In conclusion, vaginal evisceration is rare but potential life-threatening a condition. They should be considered in the differential diagnosis of patients who had pelvic operation history presenting with vaginal bleeding and pelvic pain. Management should be planned as individually related to the patient's symptoms and condition.

**Endometrium Kanseri Nedeniyle Opere** Hastanın 8 Yıl Sonra Coitus Sonrası Vajinal Cuff Evisserasyonu

Histerektomi olmuş hastalarda coitus sonrası vaginal cuff rüptürü ender görülen bir durumdur. Bu durum genellikle vaginal histerektomi geçirmiş post-menapozal hastalar ya da pelvik taban bozuklukları nedeniyle çok sayıda cerrahi operasyon geçirmiş hastalarda izlenir. Literatürde total abdominal histerektomi (TAH) + pelvik lenf nodu diseksiyonu sonrası az sayıda vajinal cuff rüptürü vakası bulunmakta olup bu vakalarda serviks kanseri sonrası yapılan operasyonlardır. Bu makaledeki olguda 49 yaşında endometrium kanseri nedeniyle 8 yıl önce total abdominal histerektomi (TAH), bilateral salpingooferektomi (BSO), pelvik-paraaortik lenf nodu diseksiyonu (PPLND) yapılan hastanın coitus sonrası vaginal cuff rüptürü ve ince barsak prolapsusu durumu anlatılacaktır.

**Anahtar Kelimeler :** Vajinal evisserasyon, Vajinal cuff rüptürü, Coitus, Endometrium kanseri

### References

- 1. Somkuti SG, Vieta PA, Daugherty JF et al Transvaginal evisceration after hysterectomy in three premenopausal women: A presentation of three cases. Am J Obstet Gynecol 1994;171:567-8
- Ramirez PT, Klemer DP Vaginal evisceration after hysterectomy: a literature review. Obstet Gynecol Surv 2002;57:462-7
- 3. Woo Dae Kang, Seok Mo Kim, Ho Sun Choi Vaginal

- evisceration after radical hysterectomy and adjuvant radiation. J Gynecol Oncol 2009;1:63-4
- 4. Croak AJ, Gebhart JB, Klingele CJ et al Characteristics of patients with vaginal rupture and evisceration. Obstet Gynecol 2004;103:572-6
- Hur HC, Guido RS, Mansuria SM et al Incidence and patient characteristics of vaginal cuff dehiscence after different modes of hysterectomies. J Minim Invazive Gynecol 2007;14:311-7
- Kowalski LD, Seski JC, Timmins PF et al Vaginal evisceration: presentation and management in postmenopausal women. J Am Coll Surg 1996;183:225-9
- 7. Velchuru VR, Munasinghe N, Tou S, Preston J Vibrator in the peritoneal cavity:a case of post-hysterectomy vaginal vault evisceration. J Obstet Gynaecol 2006;26:826-7.
- Iaco PD, Ceccaroni M, Alboni C et al Transvaginal evisceration after hysterectomy: is vaginal cuff closure associated with reduced risk? Eur J Obstet Gynecol Reprod Biol 2006;125:134-8.
- 9. Nezhat CH, Nezhat F, Seidman DS, Nezhat C Vaginal vault evisceration after total laparoscopic hysterectomy. Obstet Gynecol 1996;87:868-70.
- Nasr AO, Tormey S, Aziz MA, Lane B Vaginal herniation: Case report and review of the literature. Am J Obstet Gynecol 2005;193:95-7.