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-paraortic 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. 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-paraortic lymphadenectomy for stage Ib endometrioid type endometrial cancer.

*Case Report*

A 49-year old woman was admitted to our department with complaints of acute onset severely abdominal pain, vaginal spotting and feeling of fullness between her legs during the sexual intercourse. She denied any instrumentation or unusual, aggressive sexual intercourse. She underwent a TAH, BSO and bilateral pelvic-paraortic lymphadenectomy for stage Ib 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 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.

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. 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 institute, Croak et al. Determined the rate of vaginal evisceration as 0.032%, among all hysterectomies and pelvic repair procedures. Subsequently, at the largest published retrospective study, Hur et al. reported a 0.09% incidence of vaginal evisceration following hysterectomy. Kowalski et al reported that postmenopausal women constituted 60% of all cases. 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. 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 surgical 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 intercourse is most frequently etiological factor associated with vaginal evisceration. However, in the postmenopausal population, it is commonly associated with vaginal atrophy, chronic pelvic prolapse and prior prolapse surgery. Also, it has been reported that presence of enterocele increased the risk of vaginal rupture in this population. 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. In our case, another predisposing factor for vaginal evisceration is prior radiotherapy. The pathophysiology of evisceration following adjuvant radiotherapy is progressive oblitative endarteritis resulting to hypovascular, hypoxic and hypocellular a tissue.

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. However, following this, Iaco et al. noted that surgical route did not impact the evisceration rate. 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. Following publication of Hur et al. supported this idea. 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 continuously 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.

Vaginal evisceration is commonly associated with non-specific 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.

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, assess 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 patients whose sexual function is not issue, colpocleisis has been proposed. Very rarely recurrencies 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 Hastannın 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 geçmiş post-menopozal hastalar ya da pelvik taban bozuklukları nedeniyle çok sayıda cerrahi operasyon geçmiş hastalarda izlenir. Literatürde total abdominal histerektomi (TAH) + pelvik lenf nodu diseksiyonu sonrası az sayıda vajinal cuff rüptürü vakası bulunmaktadır olup bu vakalarda serviks kanseri sonrası yapılan operasyonlardır. Bu makaledeki olguda 49 yaşında endometrium kanseri nedeniyle 8 yıl önce total abdominal histerektomi (TAH), bilateral salpingoofektomi (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

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