

# Omentectomy with Vaginal Approach and Vaginal Repair as a Treatment of Omental Prolapse After Postcoital Vaginal Vault Rupture: Case Report

## Postkoital Vajinal Kubbe Rüptürü Sonrası Omentum Prolapsusunun Vajinal Yoldan Omentektomi ve Vajen Onarımı ile Tedavisi

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**ABSTRACT** A 48-year-old woman was referred to our hospital for postcoital omental prolapse through vagina six months after hysterectomy. On vaginal examination, 20x20 cm omental tissue was protruded through the vaginal vault defect. Partial omentectomy was done with vaginal approach and vaginal defect was repaired. We preferred vaginal route to repair vaginal cuff because there was not intestinal prolapse and there was no suspicion of intestinal injury. Several methods are described in the literature to repair vaginal cuff. Laparoscopy or laparotomy can be performed if exploration is needed. Vaginal evisceration is very rare but potentially life-threatening condition therefore gynecologists should be familiar with this situation.

**Keywords:** Hysterectomy; surgical wound dehiscence

**ÖZET** 48 yaşındaki kadın olgu, histerektomiden 6 ay sonra postkoital vajenden omentum prolapsusu nedeniyle tarafımıza yönlendirildi. Vajinal muayenede 20x20 cm boyutunda omental dokunun vajinal kubbedeki defektten prolabe olduğu izlendi. Vajinal yoldan parsiyel omentektomi yapıldıktan sonra vajen kubbedeki defekt onarıldı. Barsak prolapsusu ve barsak yaralanması şüphesi olmadığından onarımda vajinal yol tercih edildi. Vajinal kubbeyi onarmak için literatürde farklı yöntemler tanımlanmıştır. Biz olgumuzda onarımda vajinal yolu tercih ettik çünkü eşlik eden barsak prolapsusu ve barsak yaralanması şüphesi yoktu. Eksplozasyon gerekli görülür ise laparoskopik veya laparotomi uygulanabilir. Vajinal evisserasyon nadir görülen fakat hayatı tehdit eden bir durumdur dolayısıyla jinekologlar bu duruma aşina olmalıdır.

**Anahtar Kelimeler:** Histerektomi; cerrahi yara açılması

Vaginal vault rupture with omental prolapse is a very rare condition. There are only few cases in the literature. Majority of the cases with vaginal vault rupture are about intestinal prolapse. Vaginal evisceration was described in literature as early as 1864 by Hyernaux however the first case with omental prolapse was described by Marchesi in 1955.<sup>1,2</sup> There are almost 110 cases with vaginal evisceration between 1900 and 2008.<sup>3,4</sup> Vaginal vault rupture is reported after laparoscopic, vaginal or abdominal hysterectomy procedure. Many ways are described to manage vaginal vault defect in the literature. In this study, we report a hysterectomised woman with omental prolapse six months after surgery.

## CASE REPORT

A 48-year-old hysterectomised woman, gravidity: 7, parity: 4, abortus: 3 was referred to our hospital for omental prolapsus through vagina. Patient has complained of a prolapsing mass through vagina. The pelvic pain started two hours after the sexual intercourse. Past medical history was uneventful. She did not have any systemic disease and her last birth was 16 years ago. Six months before her admission, the patient underwent abdominal hysterectomy due to myoma uteri and menometrorrhagia. We could not see her operation report or epicrisis however she didn't give any unusual information about her surgery and her postoperative period. She did not have any other operation and she was not taking hormonal replacement therapy or steroids. On examination, she had lower abdomen pain but no abdominal rebound. Vital signs were within normal limits. White blood cell count was 15 600/ $\mu$ L. C-reactive protein was less than 5 mg/dL. On vaginal examination, 20x20 cm omental tissue was protruded through the vaginal vault defect (Figure 1). Vaginal skin was atrophic. The omental part outside the vagina was erythematous and oedematous. Bowel was not prolapsed. Omentum was wrapped with warm, sterile, saline-soaked gauze.

Patient was informed about the vaginal operation and partial omentectomy. Informed consent was obtained. Intravenous fluid was given. Third generation cephalosporin and metronidazole were administered intravenously. Under general anesthesia, perineum, vulva, vagina and omental tissue



FIGURE 1: Omental prolapse through vaginal vault.

were cleaned twice with povidone-iodine in dorso-lithotomy position. Erythematous and oedematous omental tissue measuring 20x15 cm was clamped, cut and suture ligated. In the Trendelenburg position, small part of omental tissue was replaced into the peritoneal cavity. A 4-cm defect in the vaginal vault was seen and edges of vaginal defect were excised to provide viable tissue. Vaginal defect was repaired continuously with 0 vicryl. The postoperative course was uneventful. Antibiotics were continued intravenously until postoperative second day and the patient was discharged on the second postoperative day. Sexual intercourse was prohibited for 6 weeks and control on postoperative 14<sup>th</sup> day revealed intact and healthy vaginal vault.

## DISCUSSION

Vaginal evisceration is very rare and dangerous condition with 0.032% incidence after abdominal or vaginal surgery.<sup>5</sup> The distal ileum is the most frequent eviscerating organ and prolapse of the appendix and fallopian tubes have also been reported.<sup>6,7</sup> Most common symptoms of vaginal cuff dehiscence are pelvic or abdominal pain, vaginal bleeding and watery discharge.<sup>8</sup> This condition is highly related with previous gynecologic surgery such as hysterectomy. A literature review showed higher incidence of vaginal vault rupture after vaginal hysterectomy compared to abdominal and laparoscopic hysterectomy.<sup>3</sup> In another study, vaginal cuff dehiscence was found higher after total laparoscopic hysterectomy.<sup>9</sup> However, dehiscence is another situation and it may not progress to evisceration in all cases. It is difficult to relate vaginal evisceration with one method of hysterectomy. On the other hand, surgical technique can affect the vaginal cuff healing. Iaco et al. evaluated 3593 patients who underwent hysterectomy via abdominal, vaginal or laparoscopic procedure. The study showed no difference in the evisceration rate between patients with or without vaginal cuff closure.<sup>10</sup>

Vaginal evisceration occurs usually within the first year after the operation but could be seen many years after the operation as well.<sup>11</sup> Atrophic

vagina can be a risk factor for the situation however it could be seen in premenopausal patients and in patients using estrogen replacement therapy.<sup>9,12</sup> Other known risk factors are poor technique, post-operative infection, hematoma, coitus before healing, advanced age, radiotherapy, corticosteroid therapy, penetrative trauma or rape, previous vaginoplasty, use of the Valsalva maneuver, pelvic radiation, hypoestrogenism, and devascularization from previous surgery.<sup>13,14</sup> In our case, the vagina was atrophic. Socioeconomic and nutritional status was low in our patient which can be additional risk factor for the situation. Perineal reconstruction or abdominal sacrocolpopexy utilizing synthetic mesh are described for treatment of recurrent vaginal in the literature.<sup>15,16</sup> This methods can be effective in the case of pelvic organ prolapse.

Vaginal evisceration is a potentially life-threatening condition. Omental prolapsus alone is rarer than intestinal prolapsus. Patient should be informed and prepared for the operation urgently. Prolapsed mass should be covered with steril gauze or towel. Early antibiotic therapy should be given as well as a precaution against peritonitis. Several

methods are described in the literature to repair vaginal cuff. We preferred vaginal route to repair vaginal cuff because there was not intestinal prolapsus and there was no suspicion of intestinal injury. Laparoscopy or laparotomy can be performed if exploration is needed.

### **Informed consent**

*Informed consent was obtained for this case report.*

### **Conflict of Interest**

*Authors declared no conflict of interest or financial support.*

### **Authorship Contributions**

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