EMERGENCY SURGICAL TREATMENT OF A VAGINALLY PROLAPSED SUBMUCOUS LEIMYOMA PRESENTING WITH LIFE-THREATENING VAGINAL HEMORRHAGE: A CASE REPORT

HAYATI TEHDİT EDEN VAJİNAL KANAMA İLE PREZENTE OLAN VAJENE DOĞMUŞ SUBMÜKÖZ MYOMUN ACİL CERRAHİ TEDAVİSİ: OLGU SUNUMU

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Abstract

Aim: Uterine leiomyomata are benign smooth muscle tumors that are encountered commonly in women, especially after the beginning of the reproductive period. Symptoms and findings are usually associated with the location of the leiomyoma within the uterus. Vaginally prolapsed submucous leiomyomas may be completely asymptomatic, or may present with symptoms such as vaginal bleeding, discharge or pelvic pain. In this report, we present a rare case of a vaginally prolapsed submucous uterine leiomyoma that caused hemorrhagic shock, and discuss its emergency surgical treatment.

Key words: leiomyoma; vaginally prolapsed; vaginal bleeding; emergency hysterectomy

Özet

Amaç: Uterin myomlar kadınlarda özellikle reprodüktif çağın başlamasıyla birlikte sıkça görülen benign düz kas tümörleridir. Semptom ve bulgular genellikle myomun uterus içerisindeki yerleşim yeri ile ilişkilidir. Vajene doğmuş submüköz myomlar tamamen asemptomatik olabildikleri gibi, vajinal kanama, akıntı veya pelvik ağrı ile karşımıza çıkabilirler. Bu yazıda, vajene doğmuş submüköz uterin myoma bağlı meydana gelen hemorajik şok olgusu sunulmuş ve olgunun acil cerrahi tedavisi ele alınmıştır.

Anahtar kelimeler: myom; vajene doğmuş; vajinal kanama; acil histerektomi

Uterine leiomyomata are common benign tumors of the female reproductive tract, which are found in approximately 20-77% of all women (1, 2). These tumors may be most commonly submucosal, intramural, or subserosally located within the uterus, and patients' symptoms are associated with these locations. Submucosal leiomyomata are present in approximately 15-20% of the cases, and may occasionally prolapse through the cervix with the effect of uterine contractions and cervical dilatation (3). These masses may be further complicated with torsion around their pedicle that may lead to necrosis and infection. They may also resemble a cervical or uterine malignancy, and necessitate detailed workup such as biopsy and pelvic magnetic resonance imaging (MRI). Vaginal bleeding may also occur due to necrosis and infection, however it is usually mild, generally in terms of spotting. Herein, we report a rare case of vaginally prolapsed submucous uterine leiomyoma, which presented with severe vaginal bleeding and was subsequently managed with emergency total abdominal hysterectomy.

Case Report

A 50 year-old multiparous perimenopausal woman presented to our emergency department with heavy vaginal bleeding with an abrupt onset. She had palpitations and nausea. On her past medical history, she had been a smoker for 30 years, and also had bronchial asthma. She had been previously diagnosed with leiomyoma uteri 7 years ago, however she had not attended regular follow-up visits. She also had not undergone cervical screening in the past three years. On initial physical examination, the patient was pale and lethargic, her pulse was 140 bpm, and her blood pressure was 60/30 mmHg. On pelvic examination, an 8 cm partially necrotic vaginal mass bulging from the external cervical os was noted. There was profuse bleeding originating from the upper portion of the mass, however the exact bleeding site could not be visualized. On transvaginal ultrasound, the mass measured 8 cm in diameter, and it obliterated the upper third of the vaginal canal. Endometrial thickness was 4 mm. Bilateral adnexal structures were normal. There was no free fluid in the pouch of Douglas.

Fluid resuscitation was initiated immediately, and blood products were ordered to the blood bank. Initial laboratory tests revealed hemoglobin and hematocrit levels of 4.8 gr/dl and 17%, respectively. Biochemistry panel was in normal range and beta-hCG was negative (<5 U/ml). Coagulation studies were also in the normal reference range. Two units of whole blood, 4 packed red blood cells and 4 units of fresh frozen plasma were transfused, and the patient was clinically stabilized.

A punch biopsy was taken from the mass to rule out a malignancy. She was hospitalized in the intensive care unit, and close follow-up was planned. In the following hours, vaginal bleeding increased, and the patients clinical status again began to deteriorate with tachycardia, hypotension and decreased urine output. Another complete blood count was performed, which revealed hemoglobin and hematocrit levels of 5.7 gr/dl and 19%, respectively. The patient was re-evaluated and emergency surgical intervention was planned with simultaneous fluid replacement and blood product transfusion. Her clinical situation was discussed with the patient and her relatives, and they gave consent for a total hysterectomy.

In the operating room, the patient was placed in the dorsal lithotomy position. Examination under general anesthesia was performed, and the mass was evaluated for a possible vaginal myomectomy. However, the stalk of mass could not be visualized due to large lesion size and ongoing heavy bleeding. Proceeding to emergency hysterectomy was decided. An infraumbilical median incision was performed. A bicornuate uterus and grossly normal adnexal structures were noted upon initial exploration of the pelvis. The mass was palpated under the cervicovaginal junction, within the vaginal lumen. Total abdominal hysterectomy and bilateral salpingo-oophorectomy was performed, and the mass was removed en-bloc with the uterus (Figures 1 and 2). In total, 11 units of erythrocyte suspensions and 6 units of fresh frozen plasma were transfused perioperatively. The patient was stabilized, and her postoperative course was uneventful. She was discharged home on the 4th postoperative day without any complications. Final pathological examination was reported as a partially necrotic and degenerated submucous uterine leiomyoma that originated from the isthmic segment of the uterine cavity. Analysis of the endometrium was reported as normal.

Figure 1: Intraoperative photograph demonstrating the submucous leiomyoma protruding from the external cervical os

Figure 2: A photograph of the operative specimen (Note that the mass is degenerated and partially necrotic).

Discussion

Uterine leiomyomata are very common lesions in women of reproductive age, and are an important cause of abnormal uterine bleeding. Most leiomyomas that result in bleeding are submucosal. In a previous study, Vercellini et al. reported that 38% of the women with abnormal uterine bleeding had submucous uterine leiomyomata (4). These masses rarely prolapse into the vagina through the cervical canal, especially when they have a narrow stalk. Although patients with a vaginally prolapsed submucous leiomyomata may present with vaginal bleeding, discharge or pelvic pain, they may be completely asymptomatic (5). Asymptomatic cases generally receive an incidental diagnosis during pelvic examination. In cases with a recently discovered vaginal mass protruding through the cervical canal, most likely diagnoses are uterine polyps or submucous leiomyomata. However, it should be emphasized that cervical malignancies or uterine sarcomas may also present similarly. Although imaging modalities are not always

required, in suspicious cases, it may provide useful to perform an ultrasound or pelvic MRI (6). In our case, we performed ultrasound to evaluate the vaginal mass, uterus and adnexal structures.

In cases with findings compatible with a vaginally prolapsed leiomyoma, biopsy of the lesion prior to its removal is usually not necessary. However, in unequivocal cases, a punch biopsy should be performed prior to definitive treatment. Differential diagnoses in these cases commonly include a prolapsed endometrial polyp or a cervical polyp. However, a prolapsed uterine sarcoma or a polypoid form of uterine adenomyosis is also rarely diagnosed (7, 8). In our case, we chose to perform a biopsy to rule out a cervical or uterine malignancy, however we could not wait for the pathological analysis result due to the emergency status of the patient.

Historically, hysterotomy or hysterectomy was routinely performed to treat submucosal leiomyomata (9). Today, this has been largely replaced by hysteroscopic transcervical resection, which is a minimally invasive surgical procedure that provides effective and safe removal of these masses (10). However, there are some limitations of this technique. Cammani et al. reported that hysteroscopic myomectomy could be the treatment of choice in patients with a lesion size of 6 cm or less (11). Hysteroscopic myomectomy is also contraindicated in cases with suspected pelvic infection, intrauterine pregnancy, and cervical or uterine cancer. In our case, hysteroscopic myomectomy was not attempted due to large lesion size and heavy bleeding. Golan et al. reported that in their case series, subsequent total abdominal hysterectomy was performed in the 13.7% of patients that underwent initial transvaginal resection of a vaginally prolapsed pedunculated submucous myoma, mostly due to persistent vaginal bleeding (12). We also could not perform a transvaginal resection of the leiomyoma and proceeded to total abdominal hysterectomy in our case.

In summary, uterine submucous leiomyomata may rarely prolapse into vagina and cause excessive vaginal bleeding. In patients with a desire for future fertility, conservative treatment measures such as hysteroscopic resection or vaginal myomectomy should be implemented first. In women who have completed childbearing, hysterectomy is generally the treatment of choice, especially if the lesion is too large to remove vaginally.

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