

Vulvar Endometrioma: A Case Report

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ABSTRACT

Endometriosis is a benign and common disorder that is characterized by ectopic endometrium outside the uterus. Extrapelvic endometriosis, like of the vulva, is rarely seen. We report a case of a 47-year-old woman referred to our clinic due to complaints of a vulvar mass and periodic swelling of the mass at the time of menstruation. During surgery, the cyst ruptured and a chocolate-colored liquid escaped onto the surgical field. The cyst was extirpated totally. Histopathological examination showed findings compatible with endometriosis. She was asked to follow-up after three weeks. The patient had no complaints and the incision field was clear at the follow-up.

Keywords: *cystic mass, endometriosis, vulva*

INTRODUCTION

Endometriosis is a gynecological disease that affects 10 % of reproductive-age women and is associated with dysmenorrhea, dyspareunia, perimenstrual symptoms and infertility¹. Although its estrogen-dependence is well-known, the pathophysiology is still unclear. Retrograde menstruation is a widely accepted mechanism causing endometriosis that might explain ectopic endometrial tissues.

Endometriosis can not be diagnosed with symptoms and physical examination alone and histopathology is the mainstay of the diagnosis. Visualization of the endometriosis implants, taking a sample of suspected area and microscopic examination give a definitive diagnosis. Microscopic examination of tissue samples may reveal endometrial cells and glands in areas outside the uterus.

Extrapelvic endometriosis is fairly rare. Implantation of endometrial tissues in the vulva, skin, lung and abdominal wall muscle has been reported before². We present a case of a patient with vulvar endometrioma that underwent cyst extirpation, and the diagnosis was revealed by the histopathologic examination.

CASE REPORT

A 47-year-old woman, gravida 2, para 2, was referred to our clinic with a complaint of a vulvar mass for six months. The mass was characterized by local pain. The patient had a regular menstrual cycle with periodic swelling of the mass that could suggest endometriosis. Her transvaginal ultrasonographic examination and biochemical markers were both normal. The patient did not have a history of vulvar surgeries like Bartholin's gland cyst extirpation, abscess marsupialization, vulvar

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biopsy or episiotomy. On physical examination, a firm cystic mass, 4 - 5 cm in diameter and covered by normal skin, was found within the upper-portion of the right labium majus (Figure 1).



Figure 1. During surgery, the cyst ruptured and a chocolate-colored liquid escaped onto the surgical field.

During surgery, the cyst ruptured and a chocolate-colored liquid escaped onto the surgical field. Histopathological findings showed endometrial stroma with hemorrhage. The hemorrhagic areas showed clusters of hemosiderin-laden macrophages (Figure 2).

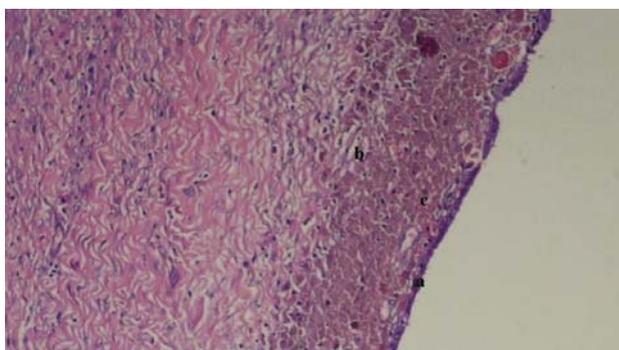


Figure 2: The histopathologic examination showed endometrial epithelium (a), the aggregation of hemosiderin pigments (b) and stroma (c). (Hematoxylin & Eosin)

Three weeks after the surgery, the patient was called for a follow-up examination. The patient was asymptomatic and there was no surgery-related complications.

DISCUSSION

Although endometriosis is one of the most-investigated disorders in gynecology, its etiology and pathophysiology still remain unclear. An inflammatory process has been demonstrated in some studies by increased concentrations of macrophages and cytokines – chemokines and their receptors, B cells and T cells³. Because of its regression after menopause, it is believed to be an estrogen- dependent disease.

The symptomatology of the disease includes chronic pelvic pain, dyspareunia, dysmenorrhea perimenstrual symptoms and infertility. Oehmke F. et al.⁴ conducted a research about the impact of endometriosis on the quality of life. Out of 65 women affected by endometriosis, they reported dyspareunia in 36 %, dysmenorrhea in 34 % and infertility in 5 % of the patients. CA-125 levels may be high in the presence of endometriosis, however, it can not be used in monitoring the disease after treatment.

There are some theories about the spread of endometriosis. Although retrograde menstrual flow is the most accepted theory for extrapelvic endometriosis, endometriosis including the vulva may be the result of a lymphatic or hematogenous spread. In a study, vulvar endometriosis was noted in the Bartholin's gland and in a surgical scar that occurred subsequently after episiotomy, trauma or biopsy⁵. Ulcerations, punctate foci of endometriosis or cystic mass were established as the main manifestations in those cases.

In the differential diagnosis of vulvar endometriosis, mucous cyst, Bartholin's cyst or abscesses, lipoma and scene gland cyst must be considered. Furthermore, a biopsy of the lesion is required for a definitive diagnosis.

The treatment must be directed to prevent the recurrence and provide a good cosmetic result, with the preferred treatment being complete surgical cyst extirpation. Although needle aspiration of the lesion is not a decisive treatment, it can be used as a diagnostic tool. To the best of our knowledge, five cases of clear-cell carcinoma arising from a vulvar endometriosis have been reported so far⁶. Follow-up after surgery is warranted for a possible malignant transformation of an extra-pelvic endometriosis. Recurrence and advanced age seem to be the main risk factors for the malignancy. In these cases, a wide surgical excision should be performed.

In conclusion, the causation of an extrapelvic endometriosis remains unknown. Although our patient had not undergone any vulvar surgery that might have made implantation easier, endometriosis had occurred. Pruritus or some trauma may have led to this implantation.

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