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### Case Report

# Endometriosis in episiotomy scar: A case report

## Epizyotomi skarında gelişen endometriozis: Olgu sunumu

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## Abstract

Endometriosis refers to the presence of functional endometrial tissue outside the uterine cavity. The most common sites of endometriosis are the ovaries and visceral peritoneal surfaces. Endometriosis may also occur in extrapelvic sites and abdominal or episiotomy scar due to hysterectomy, cesarean section and vaginal birth. Perineal endometriosis is defined as the presence of endometrial tissues in the perineum. A-35-year old, G2P2 woman with a history of two vaginal births was admitted to our hospital with a complaint of perineal pain and mass. She has been symptomatic for five years following her last vaginal birth. Her pain was located in her mediolateral episiotomy scar. She reported worsening pain during menstruation. The examination revealed a semi-mobile, soft mass measuring 2.5x2x2 cm at the episiotomy scar. Surgical excision of the mass was performed, and histopathology revealed perineal endometriosis. Surgical excision of the endometriotic implant is an excellent option to treat perineal endometriosis. Perineal endometriosis should be kept in mind in patients with a perineal mass and pain.

Key words: Endometriosis; episiotomy; perineal pain; mass

## Öz

Fonksiyonel endometrial dokunun uterin kavite dışında bulunmasına endometriozis denir. Over ve viseral peritoneal yüzeyler en sık tutulan yerlerdir. Ekstrapelvik bölgelerde özellikle sezaryen ve histerektomiyi takiben skar bölgelerinde ve epizyotomili vajinal doğum sonrasında perineal endometriozis görülebilir. Perineal bölgede endometrial dokunun bulunması perineal endometriozis olarak adlandırılır. Otuz beş yaşında, G2P2, vajinal yolla iki doğumu olan kadın hasta, perineal bölgede şişlik ve ağrı şikayetiyle hastanemize başvurdu. Semptomları beş yıldır mediolateral epizyotomi skarına uygun yerde, mentrüasyonla artan ağrı şeklinde idi. Muayenede skar hattında 2,5x2x2 cm boyutlarında, semi-mobil yumuşak kıvamda kitle tespit edildi. Perineal kitle cerrahi olarak çıkartıldı ve patoloji sonucu endometriozis olarak rapor edildi. Perineal endometriozis tedavisinde cerrahi eksizyon iyi bir tedavi alternatifidir. Perineal endometriozis bu bölgede kitle ve ağrı şikayeti olan hastalarda ayırıcı tanıda düşünülmelidir.

Anahtar Kelimeler: Endometriozis; epizyotomi; perineal ağrı; kitle

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#### 1. Introduction

Endometriosis is defined as the presence of functional endometrial tissue at a location other than the uterine cavity in which it is typically found (1). Endometriosis usually occurs with findings such as dysmenorrhea, irregular menstrual cycles, dyspareunia and infertility in patients. Possible locations of endometriosis can be pelvis, peritoneum, ovaries, the pouch of Douglas and the uterosacral ligaments (1). Although extrapelvic endometriosis is rare, it could be seen in many tissues of the body and any organs such as the urinary bladder, small intestines and lungs (2). Endometriosis could also be seen on the anterior abdominal wall, skin and subcutaneous tissues following abdominal gynaecological and obstetric operations (3,4). Besides, endometriosis could be rarely seen in the episiotomy scar line which is performed during vaginal delivery. The most common signs of perineal endometriosis are palpable mass and pain on the perineal site. The definitive treatment is the surgical excision of the scar tissue. We aimed to present a case presenting with scar endometriosis, possible etiologies of the pathology and management options with a literature survey.

#### 2. Case report

A-35-year old G2P2 woman with two children, who gave her last birth five years ago, was admitted with complaints of perineal pain and swelling. At admission, the patient permitted her medical data and images to be used if wanted. Her symptoms started five years ago at the same area where a mediolateral episiotomy was performed during spontaneous vaginal delivery, and the symptoms worsened with menstruation. Gynaecological examination revealed a right mediolateral episiotomy scar, and a pelvic ultrasonographic scan was within normal limits; no pelvic endometriosis was detected. A semi-mobile mass measuring 2.5x2x2 cm was detected at the episiotomy scar. The fibrotic mass, with brown and grey regions inside, was excised entirely with a-1 cm healthy tissue around under general anaesthesia (Figure 1). Histopathological diagnosis was endometriosis with endometrial glands and stroma structures (Figure 2). Free bleeding areas, lymphocytes, neutrophils and histiocytes were noted in the endometrial stroma (Figure 3). The patient was discharged with healing.



Figure 1. Macroscopic endometriosis, the specimen excised into two pieces



**Figure 2.** Endometriosis foci including endometrial gland and stroma in fibrous tissue (HXE 4)



Figure 3. Endometriosis foci containing endometrial gland and stroma (HXE 10)

#### 3. Discussion

Endometriosis is the presence of the functional endometrial tissue at an ectopic place outside the uterus, and it is seen asymptomatically in 2-22% of reproductive age women (1). The endopelvic ectopic implants are located in the ovaries, the fallopian tubes whereas, the more infrequent extrapelvic implants are located in the bladder, the abdominal wall and the perineal region (5,6).

Perineal endometriosis is the presence of endometrial tissues in the perineal sites. The incidence of perineal endometriosis was reported by 0.32% among all endometriosis cases (7). Endometriosis in episiotomy scar is such a rare pathology, occurring in only 0.00007% of births (8). Scar endometriosis develops more commonly in cesarean sections than in vaginal deliveries (9,10). It is one of the challenging diseases that is hardly managed. Three typical characteristics of perineal endometriosis for women in reproductive ages should be considered when taking a history; (a) the history of episiotomy during vaginal delivery; (b) a tender nodule or mass at the perineal lesion; and (c) progressive and cyclic perineal pain. If these three criteria were met, the predictive value of perineal endometriosis was 100% (11).

In a review of 17 cases with perineal endometriosis, all patients presented with a palpable painful lesion with a mean size measuring 2.38 cm. All patients had a history of vaginal delivery with an episiotomy (2). In a study by Wang et al., a total of 30 perineal endometriosis cases with normal CA125 levels were cured after complete surgical excision (7). Therefore, the establishment of a correct diagnosis is a challenge for the physician that takes some time, and the patients experience physical and psychological stress.

Many theories were presented for the etiopathogenesis of perineal endometriosis; endometrial cell implantation during the menstrual period or mechanical transplantation to episiotomy scar during the delivery was pointed (4). Symptoms begin when the relocation of endometrial tissues in their new location and the response to cyclic hormonal pattern starts. Symptoms are related to the location of the endometrial tissue. The reason for scar endometriosis in a cesarean section operation was explained by more manipulation (direct implantation) than in a vaginal delivery that meant the exposure of the decidua to the subcutaneous tissue (10). Besides, it was stated that the possibility could increase due to complications that could develop during vaginal delivery, such as perineal tear and anal sphincter injury (10).

Hernia, an abscess, lipoma, hematoma, sebaceous cysts, primary and metastatic cancers should be considered for differential diagnosis. Ultrasound and magnetic resonance imaging are the recommended diagnostic methods for the evaluation of the mass; however, the clinical support of these methods are restricted (13). Fine-needle aspiration cytology offers a safe and effective tool for the identification of endometriosis and supplies the need for diagnostic surgical procedures in some patients (14).

The treatment can be planned either by surgically or medically or both (15,16). Definite diagnosis is obtained by pathological examination following the surgical excision. Surgical excision with a-1cm healthy tissue surrounding is the gold standard for the treatment. In the management of these cases, a consultation with general surgery may be required when the lesion involves the anal sphincter or often a misdiagnosis, including an inguinal/incisional hernia or abdominal wall tumors is present. According to the study of 31 cases of perineal endometriosis with anal sphincter involvement, narrow excision and primary sphincteroplasty were indicated for the treatment of perineal endometriosis with anal sphincter involvement (15). The healing process should be followed carefully, and the lesion should be checked for persistence in these patients.

Medical management, including oral contraceptives, danazol, progestogens, gonadotrophin-releasing hormone agonists, might provide temporary relief of symptoms. No drug eradicates endometriosis or provides a long-term cure, and recurrence might occur as the hormonal therapy is interrupted (11).

In conclusion, episiotomy scar endometriosis should be kept in mind in patients with a painful perineal mass with a history of operative vaginal delivery. The accurate diagnosis and the appropriate management is vital in the cure of the patients.

#### **Declaration of Interest**

The authors report no conflict of interest.

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