

## Case Report

# Endometriosis in episiotomy scar: a case report

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### Abstract

Endometriosis is defined as the presence of functional endometrial tissue outside the uterine cavity. The most frequent clinical presentation is that of a palpable subcutaneous mass near surgical scars associated with cyclic pain and swelling during menses. Physical examination is essential for an accurate diagnosis. Here, we present a case with perineal endometriosis in episiotomy scar treated with wide surgical excision. The recovery was uneventful with excellent functional and esthetic results. Six months after the operation, woman was asymptomatic. Optimal management of endometriosis is extensive surgical excision with care to remove all affected tissue. The advantage of surgery includes less risk of recurrence and obtaining tissue pathology to exclude malignancy.

### Key words:

Endometriosis, episiotomy scar

## Introduction

Endometriosis is a common, benign, chronic, and estrogen-dependent disorder, defined as the presence of functional endometrial tissue outside the uterine cavity. It can be associated with many distressing and debilitating symptoms, such as pelvic pain, severe dysmenorrhea, dyspareunia and infertility, or it may be asymptomatic, and incidentally discovered at laparoscopy or exploratory surgery [1]. Despite numerous studies, considerable controversy remains regarding the incidence, pathogenesis, natural history, and optimal treatment of this disorder. Pelvic intraperitoneal surfaces are the most common sites of endometriotic disease but perineal endometriosis is a relatively uncommon condition [2]. Autologous transplantation of vital endometrial cells to an open episiotomy wound during vaginal delivery, especially when manual uterine exploration and postpartum curettage are performed, seems to be the pathogenic mechanism of perineal endometriosis [3]. We present a case with perineal endometriosis in episiotomy scar treated with wide surgical excision.

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## Case presentation

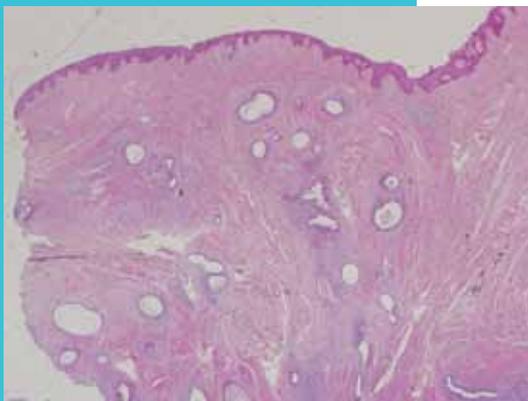
A 31 years old women with pain and swelling in perineal region was referred to our department from emergency unit for consultation. Her pain was progressive and cyclical, correlating with her menstrual cycle. She has been treated by her gynecologist with several courses of antibiotics for presumed infection. She described her pain as severe, preventing her from sitting, coitus and performing ordinary daily activities. Her past medical history was significant for a previous pregnancy with vaginal delivery necessitating an episiotomy four years ago. Her pain has started three months after the delivery and she has first noticed a swelling at perineal region one year following delivery. At physical examination a firm nodule measuring 4 x 2 cm was palpable in her episiotomy scar, closely associated with anal canal. She was admitted for incision and drainage of a perineal cyst.

Wide excision was performed under spinal anesthesia in lithotomy position, without damaging anal sphincter when chocolate-coloured fluid were obtained. Microscopic examination showed intensive endometrial glands with typical stroma, blood, and hemosiderin-laden macrophages under vulvar squamous epithelium (Fig. 1 and 2). The postoperative course was uneventful and the patient was discharged on the sixth day following surgery. At six months follow-up period patient was free of her symptoms.

## Discussion

Endometriosis is one of the most common benign gynecological conditions. It may affect many organs such as ovaries, uterosacral and large ligaments, fallopian tubes, pelvic peritoneum, vagina, pouch of Douglas, gastrointestinal tract, inguinal hernia sac, incisional scars after gynecological surgery and cesarean section, but the incidence of endometriosis at the episiotomy site is quite rare [4-6].

**Figure 1.**



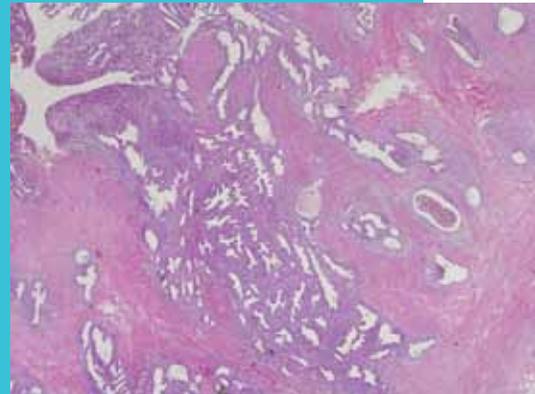
*Endometrial glands and stroma under vulvar epithelium*

The etiology and the pathogenesis of endometriosis are controversial. Theories about pathogenesis of endometriosis have generally been attributed to direct implantation, lymphatic dissemination, coelomic metaplasia, or hematogenous spread. Perineal trauma, especially perineal tearing or episiotomy scars appear to be more commonly affected if the episiotomy is associated with a vaginal delivery and subsequent uterine curettage [7]. The etiology of this type of endometriosis can be explained by the theory of transplantation [8]. We believe that perineal endometriosis in our case was the result of implantation during vaginal delivery.

The most frequent clinical presentation is that of a palpable subcutaneous mass near surgical scars associated with cyclic pain and swelling during menses. Physical examination is essential for an accurate diagnosis. Hard nodules are usually palpated in subcutaneous cellular tissue, below the scar. Imaging examinations are usually unnecessary because most cases are diagnosed relatively successfully, simply by means of a good anamnesis and physical examination. The use of imaging studies is restricted to surgical planning, such as in cases of larger lesions, or in order to establish differential diagnosis, when there is some doubt. Patients with perineal

endometriosis usually present with a tender perineal nodule around an episiotomy scar and it may be misdiagnosed as a local infection or an abscess [9]. Differential diagnosis of such a nodule should include an incisional hernia, cheloid, hematoma, granuloma, abscess, cysts and tumor.

**Figure 2.**



*Intensive endometrial glands and stroma in vulvar tissue*

Perineal endometriosis is best managed by complete excision of the lesion [5,6]. Recurrence rate of incomplete excision is high. The advantage of surgery includes less risk of recurrence and obtaining tissue pathology to exclude malignancy because there is a growing awareness of risk of possible transformation of endometriosis into an invasive malignancy [10,11]. Although this situation is rare, it can theoretically occur in any gonadal or extragonadal site of endometriosis.

In conclusion, endometriosis should be kept in mind in patients presenting with perineal pain or nodule, especially with a history of previous delivery necessitating episiotomy.

### Conflict of interest statement

The authors declare no conflict of interest.

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