

A Case of Endometriosis in Episiotomy Scar with Anal Sphincter Involvement

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ABSTRACT

Endometriosis is defined as the presence of endometrial tissue apart from its usual location (endometrium). It is the second most prevalent benign gynecologic disease after the presence of fibroids in women of childbearing age (incidence of 10% - 25%). Endometriosis predominantly locates on peritoneal surfaces, but it also affects the vagina, vulva, recto-vaginal septum and perineum, usually secondary to surgical or obstetric trauma. We present a case of a patient with perineal endometriosis (single nodule) in the scar of episiotomy and involvement of external anal sphincter with local and catamenial pain but with continence maintained. The endometrial nodule was removed, and wide dissection and sphincteroplasty were performed. Afterwards, treatment with GnRh analogues was prescribed for a four-month period. Surgical outcome was successful and the patient was asymptomatic during subsequent menstruations.

Keywords: Endometriosis, Episiotomy Scar, Anal Sphincter

1. Introduction

Since Allen first described it in 1896, there have been a hundred published cases of extragenital endometriosis, and just 11 cases of endometriosis at episiorrhaphy with sphincter involvement to date [1].

Frequency of endometriosis is difficult to measure. The main method for diagnosis is laparoscopy, with or without biopsy to confirm histopathology. It is associated to estrogen-dependent situations, high socio-economic level, inheritance, inflammations and iatrogenic changes. However, the etiology and pathogenesis remain controversial. There are different theories about its histogenesis: the implant theory, the metaplasia theory (ovarian, tubal and cervix localization), the vascular theory (pulmonary and umbilical localization); and the macrophagic theory, which gives more importance to the immunological factor in the pathogenesis and details how the endometrial tissue penetrates into the peritoneal cavity by retrograde menstruation and stimulates macrophage migration. Growth factors released by macrophages are able to stimulate epithelial growth if the endometrial cells express the receiver.

We present a case report of a patient with an endometriosis nodule located at the episiotomy scar and involving the external anal sphincter.

2. Case Report

A 32-year-old patient presented vulvodynia for two years; the pain was refractory to oral analgesia (ASA, paracetamol). The pain was cyclical and progressive, related to the patient's menstrual period. The pain was located at the episiotomy scar and the size of the mass increased during menstruation. Sphincter function was good. The patient had no personal or family history of endometriosis or other obstetrical or gynaecological adverse events. She had two vaginal births, the first one in 1996 with episiotomy and another one in 2000 without episiotomy. During physical examination, a firm nodule was palpated in the episiotomy scar, measuring 2 × 3 cm, that affected the external anal sphincter. Transrectal visualization gave improper visualization, so transperineal ultrasound was performed, which demonstrated a heterogeneous echogenic mass of 23 × 18 × 17 mm with an inflammatory zone around the injury. The patient was operated on under spinal anaesthesia; resection of the nodule and reconstruction of the perineal area were performed through wide excision at the level of the previous episiotomy. Right pararectal space was dissected before excision of the nodule and afterwards external anal sphincter reconstruction was required (**Figure 1**).

Characteristics of endometriosis focus compatible with endometrial tissue material were found during the inter-

vention. We sutured after interdigitally checking external anal sphincter (nodule of $2.5 \times 0.7 \times 3.5$ cm).

Histologic examination revealed endometrial tissue with signs of past bleeding and recent outbreaks (**Figure 2**). Postoperative course was uneventful, the patient was

discharged after two days, and GnRh analogues were prescribed: Decapeptil 3.75 mg/month for 3 months. The patient came to two postoperative follow-up visits in which she reported improvement of symptoms and good anal sphincter function.

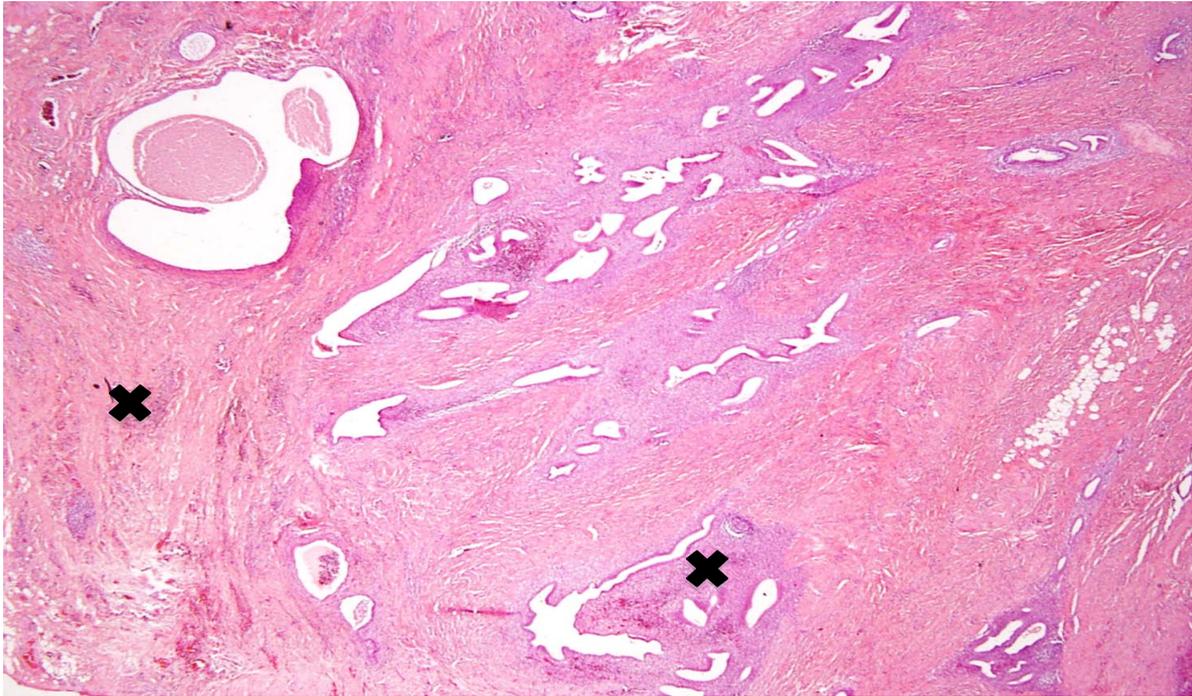


Figure 2. Endometriosis focus (stroma and glands).

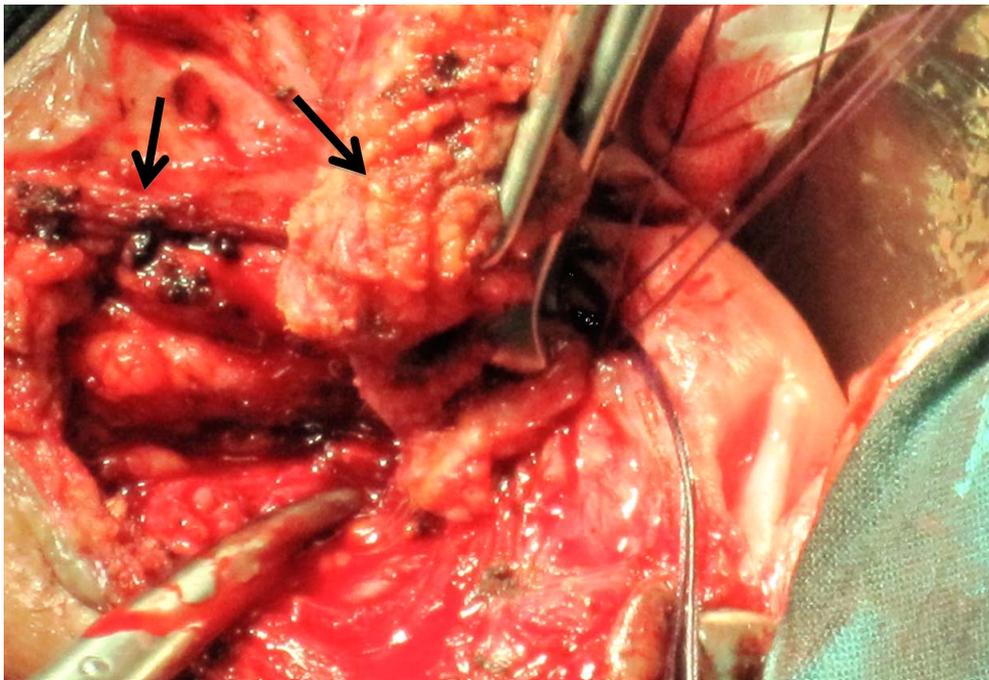


Figure 1. Involvement of sphincter in endometriosis.

3. Discussion

Regarding the origin of the nodule, it is likely to have been the result of direct implantation during vaginal birth. According to the literature, a wide surgical excision is the best choice of treatment. There are no cases in the literature of faecal incontinence after wide resection and primary sphincteroplasty. It seems that the risk of recurrence is greater than that of faecal incontinence. The number of cases reported in the literature of endometriosis nodule in episiotomy scar is too small to provide conclusions and or to suggest an appropriate treatment. They are very rare cases, with endometriosis in scars occurring in 0.3% to 1% of patients [2].

Several authors have published cases of perianal endometriosis; Dougherty compared recurrence after extensive resection versus limited resection in seven patients. Liang [3] recounts six cases in which those who received surgical treatment associated with medical treatment did not suffer recurrences versus those that only benefited from surgery. Barisic [1] and Kanellos [4] claim that the best treatment in perineal endometriosis with sphincter involvement is wide resection with primary sphincteroplasty. We believe that a wide resection of the nodule with sphincteroplasty (if the sphincter is affected) is a safe procedure with few risks. The final decision must be made by the patient on a case-by-case basis [5].

4. Conclusions

Endometriosis should be suspected when there is any injury related to the menstrual cycle.

However a definitive diagnosis may require surgical resection with histopathologic confirmation. An endometriosis focus in a scar is unusual (maximum of 0.03% - 0.4 %) and has a 1 to 20 years range of recurrence after

surgery. The final decision on treatment should always be individualized. From our experience, the best treatment seems to be wide resection of the nodule along with primary sphincteroplasty.

5. Interest of Author

The authors declare that they have no conflict of interest relating to this article.

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