

Endometriosis In an Episiotomy Scar: A Case Report

Dr. Tanu Agarwal¹, Dr. Rupa Padwalkar²

¹Junior Resident, Department of Obstetrics and Gynaecology, Goa Medical College, Goa, India

²Associate Professor, Department of Obstetrics and Gynaecology, Goa Medical College, Goa, India

Corresponding Author: Dr. Tanu Agarwal

Email: tanu7agarwal7@gmail.com

Abstract

Perineal endometriosis in an episiotomy scar is a rare form of extrapelvic endometriosis that may pose a diagnostic challenge. We report a 26-year-old P2L2 woman who presented with cyclical pain and swelling at a previous episiotomy site for one year. Examination revealed a 3 × 4 cm tender nodular swelling at the left mediolateral episiotomy scar. Perineal ultrasonography demonstrated an ill-defined hypoechoic lesion in the intramuscular and subcutaneous planes. Wide local excision was performed, and histopathological examination confirmed endometriosis. The patient remained asymptomatic at three-month follow-up. A high index of suspicion is essential in reproductive-age women presenting with cyclical pain and a perineal mass at a previous episiotomy site. Complete surgical excision remains the treatment of choice.

Keywords

Endometriosis; episiotomy scar; perineal endometriosis; extrapelvic endometriosis; scar endometriosis; wide local excision.

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I. Introduction

Endometriosis is defined as the presence of functional endometrial glands and stroma outside the uterine cavity. Although it most commonly involves the pelvis, including the ovaries, uterosacral ligaments, and pouch of Douglas, extrapelvic implantation in surgical scars is well documented but rare.¹ Perineal (episiotomy-scar) endometriosis represents an uncommon form of extrapelvic endometriosis, most often occurring following vaginal delivery with episiotomy. It may present a diagnostic challenge and can result in significant morbidity when diagnosis is delayed.²

Perineal scar endometriosis is rare, with a reported incidence ranging from 0.3% to 1%.¹ Most reported cases of scar endometriosis involve cesarean-section scars, while episiotomy-related cases constitute a small minority. Considering the rarity of this condition, we present the following case.

II. Case Report

A 26-year-old woman, P2L2, ligated, with a history of the last childbirth 2 years previously, presented with complaints of cyclical pain and swelling in the perineal region during menstruation for the past 1 year. The pain was localized to the episiotomy site, was non-radiating, and subsided with analgesics. The swelling increased during menstruation and gradually subsided thereafter. The patient was asymptomatic during the remainder of the menstrual cycle.

Her menstrual cycles were regular, with average menstrual flow. She had a history of two vaginal deliveries, both performed with episiotomy. There was no history of intrauterine manipulation during either delivery. She had no other complaints, and her bowel and bladder habits were normal.

She had previously consulted a private practitioner and was prescribed elagolix, a gonadotropin-releasing hormone (GnRH) antagonist, for 7 days; however, she experienced no symptomatic relief.

Her general and systemic examinations were unremarkable, and her vital signs were stable.

On local examination, a tense, tender, nodular swelling measuring 3 × 4 cm was noted at the left mediolateral episiotomy scar, with irregular margins. Per-speculum and per-vaginal examinations were within

normal limits. On per-rectal examination, the anal sphincter was free from the episiotomy scar, and there was no induration of the rectal mucosa.

Based on the clinical presentation of cyclical perineal pain, a tender nodular mass at the episiotomy scar, and a history of vaginal delivery with episiotomy, a diagnosis of episiotomy-scar endometriosis was considered.

Perineal ultrasonography of the episiotomy site revealed an ill-defined hypoechoic lesion measuring 1.6×1.4 cm in the left perineal region, located in the intramuscular plane and extending into the subcutaneous plane, with minimal vascularity.

Based on the clinical and radiological findings, the patient was planned for wide local excision of the lesion. An elliptical incision was made over the episiotomy scar. The lesion was found to extend into the ischiorectal fossa. Wide local excision of the mass was performed with a margin of healthy tissue to minimize the risk of recurrence, and the specimen was sent for histopathological examination. The wound was closed in layers. The postoperative period was uneventful.

Histopathological examination demonstrated endometrial glands and stroma within the scar tissue, confirming the diagnosis of endometriosis.

The patient was followed up at 3 months postoperatively and remained asymptomatic, with no pain or local discomfort.

III. Discussion

Perineal or episiotomy-scar endometriosis represents an uncommon form of extrapelvic endometriosis, despite episiotomy being one of the most frequently performed obstetric procedures worldwide. The reported incidence varies widely from 0.01% to 1%, underscoring both its rarity and the possibility of underdiagnosis.¹

The most widely accepted pathophysiological mechanism is direct iatrogenic implantation of viable endometrial cells into the episiotomy wound during delivery. This theory is supported by the temporal association with childbirth and the presence of an open wound at the time of fetal expulsion.¹ The risk has been reported to increase with intrapartum procedures such as manual uterine exploration or postpartum curettage, although several cases have developed endometriosis in the absence of such interventions.³ This suggests that physiological shedding of endometrial or decidual tissue during delivery may also contribute to perineal implantation.

The classical diagnostic triad of cyclical perineal pain, a palpable tender nodule, and a history of episiotomy is considered highly suggestive of perineal endometriosis.² Associated symptoms such as dyspareunia, difficulty sitting, and localized pruritus have also been described.¹

Imaging plays an important role in assessing the extent of disease and determining possible involvement of the anal sphincter. Magnetic resonance imaging (MRI) provides excellent soft-tissue resolution and is particularly useful for preoperative mapping of deep lesions and assessment of sphincter involvement.¹ High-frequency perineal ultrasonography and endoanal ultrasonography are also valuable adjuncts, particularly when anal sphincter involvement is suspected.² Fine-needle aspiration cytology (FNAC) may provide a rapid diagnosis in selected cases.¹

The definitive treatment of perineal endometriosis is wide local excision of the lesion with an adequate margin of healthy tissue. Complete excision is critical, as incomplete resection is associated with an increased risk of recurrence. In cases of anal sphincter infiltration, concomitant sphincteroplasty may be required.³ Adjunctive hormonal therapy, including dienogest or GnRH analogues, may be considered in selected patients; however, medical therapy alone is not curative. Long-term follow-up is advisable because recurrence may occur months or years after surgery.

Preventive measures, such as irrigation of the episiotomy wound before closure, minimizing unnecessary uterine manipulation, and changing gloves before suturing, have been proposed to reduce the risk of iatrogenic implantation. However, the effectiveness of these measures has not been definitively established. Early diagnosis, complete surgical excision, careful assessment of sphincter involvement, and appropriate follow-up remain the cornerstones of management.

IV. Conclusion

Perineal endometriosis occurring in an episiotomy scar is rare but clinically significant because of the potential for diagnostic delay. A high index of suspicion is warranted in reproductive-age women presenting with cyclical perineal pain and a mass at a previous episiotomy site. Perineal ultrasonography can aid in the initial assessment, while MRI and endoanal ultrasonography may be useful for preoperative evaluation of deep extension and sphincter involvement. Wide local excision with histopathological confirmation remains the cornerstone of treatment. Preventive perioperative measures may reduce the risk of implantation, although their effectiveness remains unproven. Early recognition and complete excision are essential to minimize recurrence and morbidity.

References

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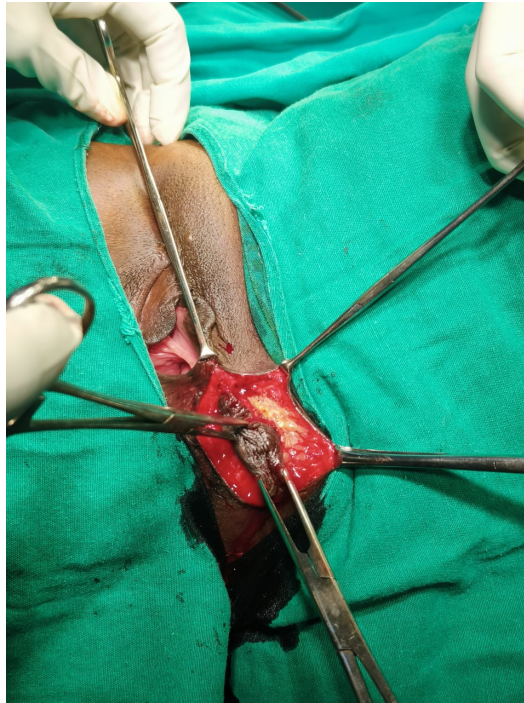


Figure1 excision of the mass at episiotomy scar



Figure 2 resuturing of the site post excision

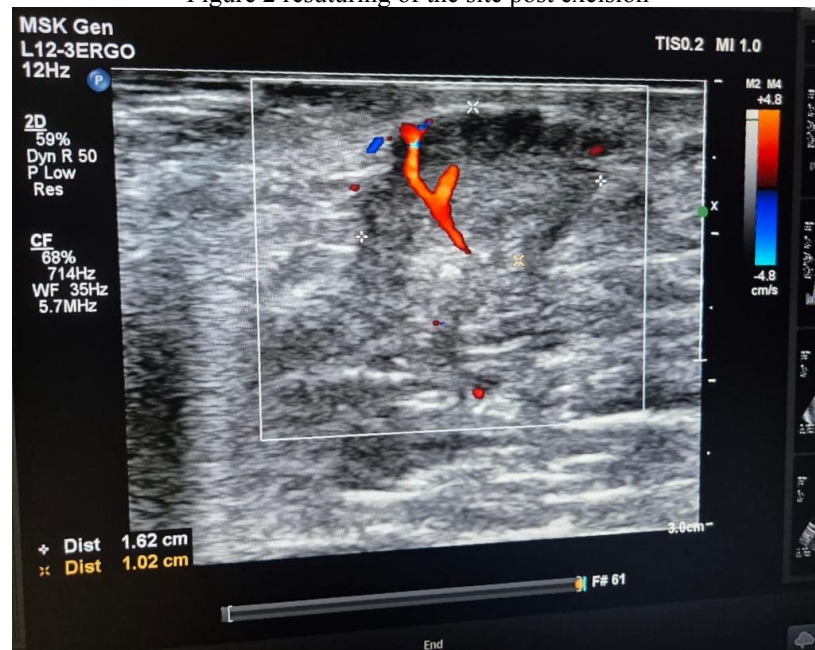


Figure 3 usg showing the mass measuring 1.6*1 cm.

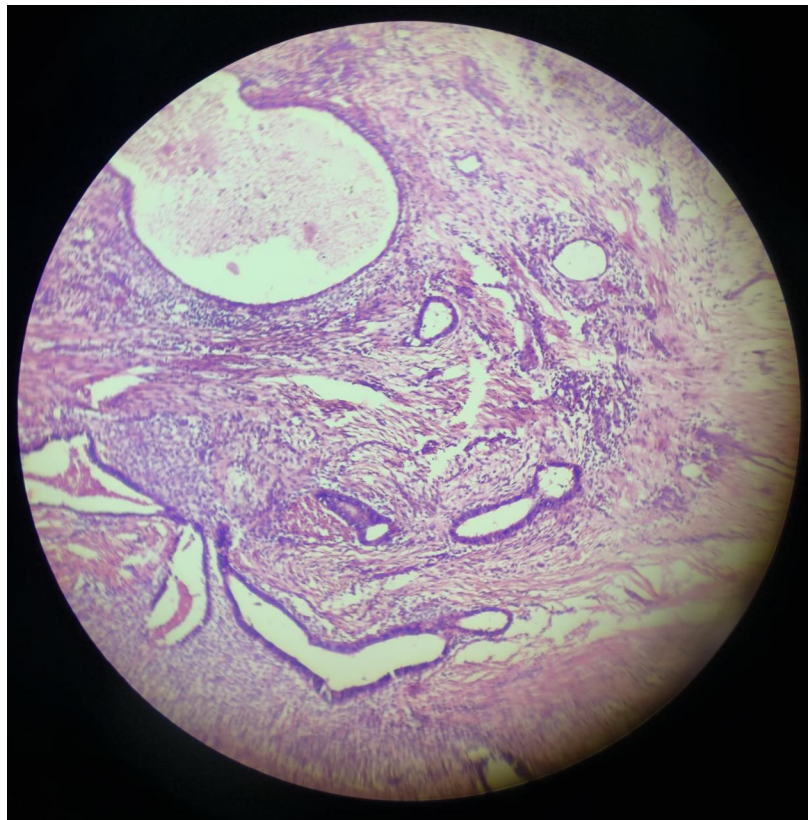


Figure 4 histopathological examination shows endometriosis glands and stroma surrounded by muscle layer.

