

Episiotomy scar endometriosis: A case report and review of literature

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ABSTRACT

Endometriosis is defined as the presence and growth of endometrial tissue implants, outside the uterine cavity. It is in a episiotomy scar endometriosis that is extremely rare but can lead to significant morbidity in patients due to local infiltration. This condition usually presents with a clinical triad of history of episiotomy, tender nodule at the scar site, and cyclical pain. Here, we report one such rare case of episiotomy scar endometriosis in the perineum of a 30-year-old young female (PIL1) who presented with swelling and pain in the perineal region. The clinical examination and ultrasonography corroborate with the diagnosis of episiotomy scar endometriosis. Excision was done and histopathological examination confirmed the diagnosis. Episiotomy scar endometriosis should always be kept in the differential diagnosis when a lady presents with painful perineal swelling which increases during menstruation. Wide local excision is the treatment of choice and confirmation of the lesion can be done with histopathological examination. If the lesion is not diagnosed within a stipulated period of time, can progress with the involvement of the anal sphincters, and may also turn into a malignant lesion.

Key words: Episiotomy scar endometriosis, Perineal scar endometriosis, Scar endometriosis

Episiotomy scar endometriosis has a very rare occurrence of about 0.03–0.15% [1,2]. Only half of the total cases present with the classic triad of history of vaginal delivery with episiotomy, cyclical pain at the scar site, and the presence of tender nodule at scar site [3,4]. There is a lot of controversy regarding the incidence, pathogenesis, and adequate treatment of this disorder. Autologous transplantation of endometrial cells probably during manual uterine exploration and curettage is likely the cause of perineal endometriosis. Ultrasonography (USG) plays a crucial role in the diagnosis of cases and this is a vital tool for pre-operative evaluation. Early diagnosis is vital as the delayed diagnosis can lead to increased morbidity resulting from anal sphincter or rectal involvement [3,5]. Recurrence and malignant transformation are the other complications of this condition [1,5]. Magnetic resonance imaging (MRI) is the best imaging modality, as it can accurately delineate the extent of the disease and its relation to the nearby structures [5]. MRI is usually not needed as USG is adequate enough for diagnosis and management of scar endometriosis.


CASE REPORT

A 30-year-old female patient presented in our gynecology outpatient department with a complaint of pain in the perineal

region for the past 5 years. The pain was progressive in nature, localized to the perineal area, and increased specifically during menstruation. She was para 1 and live 1, with the previous vaginal delivery 8 years back. Her menstrual cycle was regular of 4–5 days duration with normal flow and not associated with dysmenorrhea. She mentioned that her pain starts with the onset of menses and is progressive in nature. It persists for 3–4 days after the menses are over. There was no history of fever, weight loss, or dyspareunia. Her bladder and bowel habits were normal. There was no personal or family history of endometriosis.

Her pulse and blood pressure were within normal limits. There were no pallor, icterus, and lymphadenopathy. Clinical examination revealed a palpable nodular swelling which was tender and present lateral to the posterior fourchette at close proximity to the episiotomy scar site. On per rectal examination, rectal mucosa was free showing no extension of mass. The overlying skin was healthy with an old healed right mediolateral episiotomy scar present, without any discharge. On the basis of clinical examination findings and a history of vaginal delivery with right mediolateral episiotomy and cyclical pain, the probable clinical diagnosis of scar endometriosis was considered after ruling out other differential diagnoses such as Bartholin cyst or Bartholinitis, hernia, hematoma, sebaceous cyst, lipoma, neoplastic or metastatic tissue, desmoid tumor, and anal melanoma.

Ultrasound (US) of the perineal region with high-frequency linear probe showed a complex multi-loculated cystic lesion with low-level internal debris at the scar site (Fig. 1). Transperineal US at

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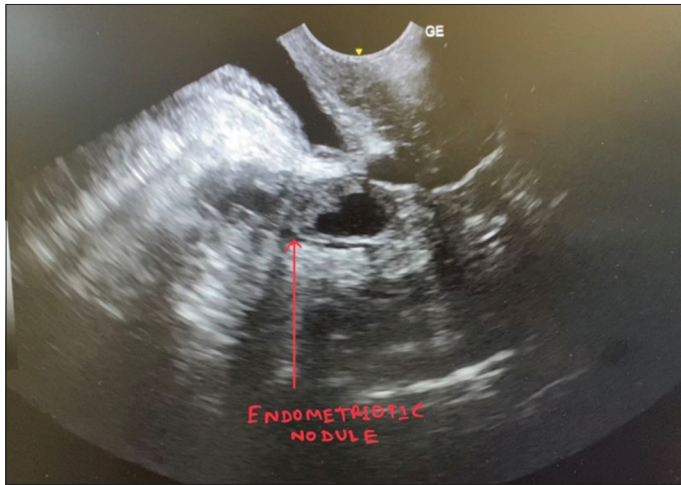


Figure 1: Transperineal ultrasound showing multi-loculated complex cystic lesion

scar site shows well-defined multi-loculated complex cystic lesion without any intralesional vascularity. Other pelvic organs such as the uterus, bilateral ovaries, rectum, and urinary bladder were normal.

Surgical excision was planned. A well-circumscribed nodular, fibrotic mass of 3.5 × 3.5 cm extending deep into the ischioanal fossa, was excised after dissecting through levator ani muscle (Fig. 2). About 1 cm of healthy tissue margin was excised and all sent for histopathological examinations. Hemostasis was secured at all steps. Space obliterated with interrupted suture using vicryl 2-0 skin sutured in mattress fashion using vicryl 2-0.

Histopathology confirmed the diagnosis of scar endometriosis, characterized by the presence of endometrial glands with stroma and hemosiderin-laden macrophages (Fig. 3). Our patient had a follow-up after 6 months and she was normal, without any clinical suspicion of recurrence.

DISCUSSION

Endometriosis, for the 1st time, was described almost 150 years back by Carl Von Rokitansky [6]. Endometriosis, the presence of ectopic endometrial tissue, can occur in both pelvic and extra-pelvic sites. The latter is relatively rare and constitutes only about 12% of all cases of endometriosis. There are various theories about its development that includes, retrograde menstruation, metaplasia, vascular theory, mechanical transposition, and the more recent macrophagic theory [6,7].

Extra-pelvic endometriosis at the surgical scar is known as scar endometriosis. It is commonly seen in the cesarean section scar. The possible cause for the development of scar endometriosis is through mechanical transposition that occurs during surgery, as per the iatrogenic implantation theory [8]. Perineal scar endometriosis, also called episiotomy scar endometriosis, is extremely rare (0.03–0.15%) [1,2]. This condition, however, can result in severe morbidity and prolonged agony in patients, due to damage of the adjacent structures like the anal sphincter or rectum at later stages [5]. Hence, early diagnosis is crucial and USG plays an important role in diagnosis and pre-operative evaluation of the disease [1,3].

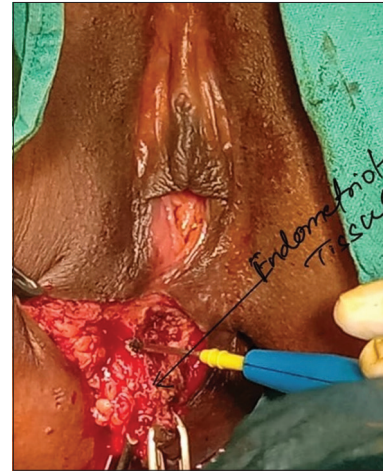


Figure 2: Excision of scar tissue

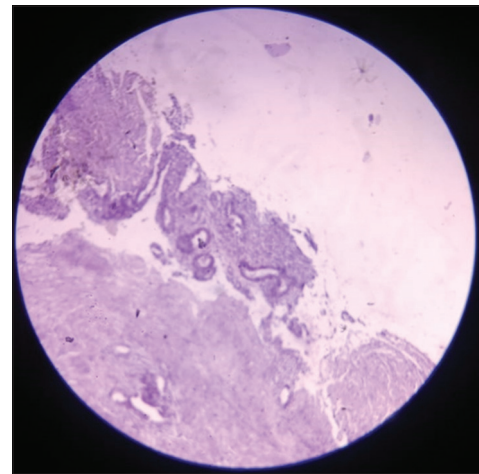


Figure 3: Histopathological picture of the endometriotic tissue

USG is often the initial and diagnostic imaging modality for perineal scar endometriosis. A high-frequency (7.5 MHz) linear probe is used for transperineal US imaging. The USG findings include hypoechoic or anechoic lesion with fine internal echoes, at the scar site, and peripheral vascularity may be seen [5]. Transrectal USG with a high-frequency probe (6.5 MHz) can be used to diagnose rectal, rectovaginal, or rectosigmoid endometriosis, but its penetration is poor [5]. Transvaginal US and computed tomography are less useful in the evaluation of perineal scar endometriosis. The involvement of an anal sphincter is a rare complication of perineal scar endometriosis [3,6]. In these complex cases of perineal scar endometriosis with anal sphincter involvement, MRI can be used as the pre-operative evaluation, which can better identify the extent of the lesion and its relation to the anal sphincter complex. The surgeon can plan preoperatively regarding the need for sphincter reconstruction in those cases, where anal sphincters are involved by the lesion. MRI can also diagnose coexisting pelvic endometriosis, which can be present in 25% of cases [8].

The treatment of choice for perineal scar endometriosis is primarily surgical complete excision with clear wide margins [4]. Hormone therapy may be used for large lesions or those with sphincter involvement before surgery to reduce size which may

also help reduce recurrence [9]. Delaying surgery may mean progression of the lesion with involvement of the anal sphincter. Therefore, histopathological examination should be performed in all cases. There can be the malignant transformation of the lesion if not taken care. There have been reports of clear cell carcinoma arising in the previous episiotomy scar [10,11].

CONCLUSION

Episiotomy scar endometriosis can be diagnosed with clinical history, proper clinical examination, and pre-operative evaluation using US imaging with a high index of suspicion in women who have delivered vaginally and present with complaints of perineal the nodule along with cyclical pain. Wide local excision remains the treatment of choice. Post-operative follow-up is essential to look for any recurrences. Histopathological examination of Endometriotic scar tissue specimen exclude any chances of malignancy which is usually a rare finding. Early diagnosis and treatment significantly reduce morbidity.

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