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Case Report

A case of scar endometriosis: rare entity

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ABSTRACT

Scar endometriosis is a rare and challenging condition characterized by the presence of endometrial tissue outside the uterine cavity, commonly arising in post-surgical scars. This condition typically follows gynecological or obstetric procedures, such as caesarean sections, episiotomies, or hysterectomies, where endometrial cells become implanted and later proliferate within the scar tissue. Symptoms often include cyclic pain and swelling of the scar that correlates with the menstrual cycle, making clinical diagnosis challenging. The prevalence and pathophysiology of scar endometriosis remain under-researched, though it is recognized as an increasingly reported entity due to heightened awareness and diagnostic advances. This surgical condition is usually mistaken with other surgical conditions. The case here reported is a case of scar endometriosis involving rectus sheath after caesarean section. This patient required surgical excision of the scar lesion. The case report, conclusion and treatment of this rare condition are being discussed further.

Keywords: Endometriosis, Scar ectopic, Previous caesarean section

INTRODUCTION

Scar endometriosis is a rare and challenging condition characterized by the presence of endometrial tissue outside the uterine cavity, commonly arising in post-surgical scars.¹ This condition typically follows gynecological or obstetric procedures, such as caesarean sections, episiotomies, or hysterectomies, where endometrial cells become implanted and later proliferate within the scar tissue.² Symptoms often include cyclic pain and swelling of the scar that correlates with the menstrual cycle, making clinical diagnosis challenging. The prevalence and pathophysiology of scar endometriosis remain under-researched, though it is recognized as an increasingly reported entity due to heightened awareness and diagnostic advances.³

CASE REPORT

A 32-year-old multiparous women presented with history of pain abdomen since 6 months came with complaints of irregular menstrual cycle since 4 months mass per

abdomen, hardness in the abdomen since 6 months. No other complaints were noted. HR was 87 bpm, BP was 110/70 mmHg, RR was 20 cpm, and temperature was afebrile. UPT was positive on admission. On per abdomen examination - nodule 3×3 cm at scar site at right side and in duration present throughout the scar site. On per speculum-cervix and vagina healthy, no white discharge noted. On per vaginal examination - uterus normal size, anteverted, bilateral fornices free and non-tender. Relevant investigations sent and Hb reported as 9.8 gm/dl. Ultrasonography (USG) abdomen and pelvis done and reported as grade 1 fatty liver and scar endometriosis. Patient underwent scar endometriosis excision procedure under spinal anaesthesia. Per operative findings are scar endometrium of size 4×2 cm noted and excised and sent for histopathology and reported as scar endometriosis (Figures 1 and 2). Patient was on IV antibiotics for 2 days and tapered to oral antibiotics. Suture removal done on post-operative day 8 and wound healthy. Patient was discharged with medical advice with weekly follow-up.



Figure 1: Per operative-scar endometriosis.



Figure 2: Hemostasis achieved.

DISCUSSION

The pathogenesis of scar endometriosis is most often explained by the iatrogenic implantation theory, suggesting that endometrial cells are accidentally deposited into surgical wounds during procedures involving the uterus.⁴ Once implanted, these cells respond to hormonal changes, resulting in cyclic pain and growth, which can progress over time. Imaging modalities such as ultrasound and MRI are crucial in identifying scar endometriosis, as these techniques help differentiate it from other conditions like abscesses or hernias.⁵ Treatment primarily involves surgical excision with a wide margin to prevent recurrence, as recurrence rates are relatively high in cases where complete removal is not achieved. Hormonal therapy may alleviate symptoms but is generally ineffective as a standalone treatment due to its limited impact on the underlying ectopic endometrial tissue.⁶ Here in our case wide local excision, with a 1 cm margin, is the treatment choice of scar endometriosis in this following patient. Several previous studies concluded that surgical removal of the exogenous endometriotic tissue is a prompt treatment that can improve quality of life. The increased cesarean section rate has amplified the chances of finding cutaneous endometriosis.⁷ Scar

endometriosis, although rare, should be considered in patients with cyclic pain and palpable masses in post-surgical scars, particularly following gynecological procedures.⁸

CONCLUSION

Early recognition and proper surgical intervention can significantly improve outcomes and reduce the risk of recurrence. Recurrence of scar endometriosis rarely seen with only a few cases reported. As expected, the larger and deeper lesions to the muscle or the fascia are more difficult to excise completely due to extent of tissue growth. Future studies are needed to better understand its pathophysiology and to establish guidelines for prevention and treatment.

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