

Letter

Nongynecologic scar endometriosis with late onset during pregnancy

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To the Editor

Endometriosis is characterized by the presence of endometrial glands or stroma outside the uterine cavity, with an incidence of 5%–15% among females of reproductive age.^{1,2} Cutaneous endometriosis is rare, with a prevalence of 0.5%–1%; approximately 70% of cases are secondary lesions.³ These typically arise after gynecologic or obstetric surgery, most notably cesarean section.^{4–6} When it occurs in surgical scars, it is referred to as scar endometriosis, with symptoms usually developing approximately 4 years postoperatively.^{7,8} The occurrence of scar endometriosis following nongynecologic laparotomy is even rarer and has been documented only in isolated case reports.⁹ Patients often present with cyclic pain, a firm reddish-brown mass, swelling, bleeding, or inflammatory signs over the affected area.^{1,4} Histopathologic examination is usually required for definitive diagnosis.¹⁰ Surgical excision with a safety margin of at least 1 cm is the standard approach for both diagnosis and treatment.^{10,11}

A 36-year-old primigravid woman at 9 weeks' gestation presented with swelling at a lower abdominal scar from a longitudinal median laparotomy performed at age 12 for acute appendicitis. The swelling had appeared 2 days earlier, without fever, abdominal pain, or other associated symptoms. Physical examination revealed a 1-cm purplish, vegetative lesion at the scar site, with a soft, nontender abdomen. Ultrasonography demonstrated a 15 × 9-mm hypoechoic subcutaneous lesion with fibrotic changes and nonencapsulated fluid, without collections or foreign bodies. The lesion was scheduled for subsequent excision, and the patient was discharged.

At 26 weeks' gestation, she underwent surgical excision in an outpatient surgery unit. By that time, the lesion had enlarged to 2 cm, prompting minor surgical excision under local anesthesia (**Figure 1**). Intraoperatively, a 1-cm-wide, 5-cm-deep fistulous tract was identified. Ow-



Figure 1. Lesion on the day of surgery. A 2-cm erythematous nodular mass protruding through the skin, located inferior to the umbilicus and surrounded by surgical markings.

ing to the advanced gestational age, only the superficial portion was excised to minimize maternal and fetal risks. Histopathologic examination of the excised tissue revealed fragments consistent with an endometriotic lesion, showing extensive stromal decidualization (**Figure 2**). Focal areas of reactive epidermal changes were noted, without evidence of atypia, hyperplasia, or malignancy. The final diagnosis was endometriosis. On reevaluation 1 week later, the patient was afebrile, asymptomatic, and demonstrated good surgical site healing.

This case illustrates cutaneous scar endometriosis manifesting as a nonpainful, enlarging nodule in a pregnant woman, 24 years after a nongynecologic laparo-

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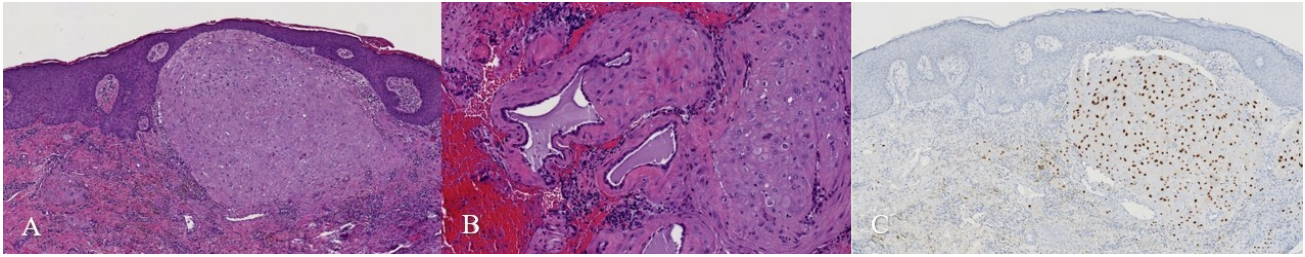


Figure 2. (A) Nodular areas composed of endometrial stromal cells with decidual changes in the dermis (hematoxylin-eosin, $\times 100$). (B) Endometrial glands surrounded by decidualized stroma (hematoxylin-eosin, $\times 200$). (C) Stromal cells showing expression of progesterone receptors and CD10 (progesterone receptor immunohistochemistry, $\times 100$).

tomy. Although a causal relationship with the appendectomy cannot be definitively established, the patient's primigravid status and lack of prior gynecologic surgery make this presentation particularly uncommon. The absence of cyclic pain and the delayed onset of symptoms underscore the need for a high index of suspicion for scar endometriosis, even in atypical presentations. The primary clinical suspicion was foreign body granuloma, a common cause of localized swelling in postsurgical scars.¹²

Other differential diagnoses included incisional hernia, lipoma, and carcinoma, highlighting the challenge of clinically distinguishing scar-related lesions.¹² Imaging modalities such as ultrasonography may help identify subcutaneous masses but often yield nonspecific findings, reinforcing histopathologic examination as the diagnostic gold standard. The presence of decidualized stroma, induced by progesterone during pregnancy, further supports the role of hormonal influence in endometriosis progression.¹³ Surgical excision was limited because of advanced pregnancy, balancing operative risk against the potential for recurrence, particularly given the intraoperative identification of a fistulous tract. This case underscores the importance of multidisciplinary

management, as studies indicate that up to 14% of patients with gynecologic scar endometriosis also have concomitant pelvic endometriosis, warranting further gynecologic evaluation.⁷

This case highlights a noteworthy presentation of scar endometriosis during pregnancy, characterized by the atypical absence of cyclic pain and markedly delayed symptom onset. It also represents an uncommon instance of scar endometriosis following nongynecologic surgery, a scenario only sporadically reported in the literature. These findings underscore the diagnostic challenges and the essential role of histopathology, while illustrating the influence of hormonal changes on disease progression. The partial excision approach balanced maternal-fetal safety with disease control, offering a valuable reference for similar clinical scenarios. By documenting this distinctive presentation, this report contributes to the understanding and management of scar endometriosis in pregnancy.

Potential conflicts of interest

The authors declare no conflicts of interest.

References

1. Alessandro P, Luigi N, Felice S, Maria PA, Benedetto MG, Stefano A. Research development of a new GnRH antagonist (Elagolix) for the treatment of endometriosis: a review of the literature. *Arch Gynecol Obstet*. 2017;295(4):827-832. doi:[10.1007/s00404-017-4328-6](https://doi.org/10.1007/s00404-017-4328-6). PMID:28255765
2. Nezhat FR, Shamsirsaz AA, Yildirim G, Nezhat C, Nezhat C. Pelvic Pain, Endometriosis, and the Role of the Gynecologist. In: *Pediatric, Adolescent, & Young Adult Gynecology*. 1st ed. Wiley-Blackwell; 2009:174-193. doi:[10.1002/9781444311662.ch20](https://doi.org/10.1002/9781444311662.ch20)
3. Jaime TJ, Jaime TJ, Ormiga P, Leal F, Nogueira OM, Rodrigues N. Umbilical endometriosis: report of a case and its dermoscopic features. *An Bras Dermatol*. 2013;88(1):121-124. doi:[10.1590/S0365-05962013000100019](https://doi.org/10.1590/S0365-05962013000100019). PMID:23539017
4. Victory R, Diamond MP, Johns DA. Villar's nodule: a case report and systematic literature review of endometriosis externa of the umbilicus. *J Minim Invasive Gynecol*. 2007;14(1):23-32. doi:[10.1016/j.jmig.2006.07.014](https://doi.org/10.1016/j.jmig.2006.07.014). PMID:17218225
5. Machairiotis N, Stylianaki A, Dryllis G, et al. Extrapelvic endometriosis: a rare entity or an under diagnosed condition? *Diagn Pathol*. 2013;8(1):194. doi:[10.1186/1746-1596-8-194](https://doi.org/10.1186/1746-1596-8-194). PMID:24294950
6. Adriaanse BME, Natté R, Hellebrekers BWJ. Scar endometriosis after a caesarean section: a perhaps underestimated complication. *Gynecol Surg*. 2013;10:279-284. doi:[10.1007/s10397-013-0807-3](https://doi.org/10.1007/s10397-013-0807-3)
7. Vellido-Cotelo R, Muñoz-González JL, Oliver-Pérez MR, et al. Endometriosis node in gynaecologic scars: a study of 17 patients and the diagnostic considerations in clinical experience in tertiary care center. *BMC Womens Health*. 2015;15(1):13. doi:[10.1186/s12905-015-0170-9](https://doi.org/10.1186/s12905-015-0170-9). PMID:25783643
8. Purvis RS, Tyring SK. Cutaneous and subcutaneous endometriosis. *J Dermatol Surg Oncol*. 1994;20(10):693-695. doi:[10.1111/j.1524-4725.1994.tb00456.x](https://doi.org/10.1111/j.1524-4725.1994.tb00456.x). PMID:7930017
9. Amini M, Moghbeli M. Appendectomy scar endometriosis: a case report. *Middle East J Dig Dis*. 2018;10(2):114-116. doi:[10.15171/mejdd.2018.100](https://doi.org/10.15171/mejdd.2018.100). PMID:30013761
10. Tatli F, Gozeneli O, Uyanikoglu H, et al. The clinical characteristics and surgical approach of scar endometriosis: a case series of 14 women. *Bosn J Basic Med Sci*. 2018;18(3):275. doi:[10.17305/bjbm.2018.2659](https://doi.org/10.17305/bjbm.2018.2659). PMID:29285999
11. Leyland N, Casper R, Laberge P, et al. Endometriosis: diagnosis and management. *J Endometriosis*. 2010;2(3):107-134. doi:[10.1177/228402651000200303](https://doi.org/10.1177/228402651000200303)
12. Scholefield HJ, Sajjad Y, Morgan PR. Cutaneous endometriosis and its association with caesarean section and gynaecological procedures. *J Obstet Gynaecol*. 2002;22(5):553-554. doi:[10.1080/0144361021000003762](https://doi.org/10.1080/0144361021000003762). PMID:12521430
13. Isidore T, Anita NOG, Coralie MM, et al. Endometriosis beyond the pelvis: a case series of cutaneous endometriosis and literature review. *Open J Obstet Gynecol*. 2024;14(1):77-88. doi:[10.4236/ojog.2024.141009](https://doi.org/10.4236/ojog.2024.141009)