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LETTER TO THE EDITOR

Clinical features of patients with endometriosis on the cesarean scar



To the Editor,

Endometriosis is defined as the presence and proliferation of the endometrium outside the uterine cavity, with the pelvis being the most common site. Subcutaneous endometriosis near the cesarean delivery scar is a rare form of extrapelvic endometriosis, occurring in 0.03–1.5% of all women having cesarean deliveries [1].

We retrospectively reviewed the data of five patients with endometriosis on the cesarean scar at the Department of Obstetrics and Gynecology of the Ege University Medical School (Izmir, Turkey) and Buca Government Hospital (Buca, Izmir, Turkey), from 2006 to 2012. Total excision of lesions was performed in all patients. All patients had pathologically confirmed endometriosis in the scar tissue (Fig. 1). The clinical features of the patients are shown in Table 1. Abdominal wall pain and palpable mass especially during menstrual days were the major complaints in all patients. All patients had a history of at least one previous cesarean section and none of them had other abdominopelvic surgeries. The mean diameter of the removed masses was 2.7 cm (range, 2–4 cm). The endometriotic lesions presented 19–46 months (mean, 30 months) after the cesarean procedure. On physical examination, extreme tenderness and semimobile or fixed nodular mass were palpated just above the right/left lateral edge of the Pfannenstiel incision scars. One patient had a bilateral endometriotic lesion. The CA-125 level rose above 35 U/mL in only one patient. Preoperatively, all patients had undergone abdominal ultrasonography. The masses in or around the cesarean scar in these patients appeared hyperechoic and irregular by ultrasonography. Surgical removal was performed with a wide excision providing clear margins in all patients with scar endometriosis (Fig. 2). The endometriotic lesions showed no involvement of the fascia.

In the postoperative period, no patients required medical treatment. The abdominal wall pain and tenderness disappeared after the postoperative period in all patients. No recurrence occurred during the follow-up period.

Cesarean scar endometriosis is a very rare disease; however, it may occur more commonly than believed [2]. Scar endometriosis is mostly seen after a cesarean section but can also occur after hysterectomy, hysterotomy, tubal surgeries, appendectomy, amniocentesis, or episiotomy [3–5]. The pain typically starts after the operation. The diagnosis is confirmed histopathologically. In the differential diagnosis, there are granulomas due to the sutures, incisional hernia, lipoma, foreign bodies, and cysts [4]. Abdominal wall sonography, computerized tomography, and magnetic resonance imaging may be helpful for the diagnosis. In the presented cases, the patients' complaints had started about 3 years after the cesarean section. The mechanism of the disease is still controversial. The pathogenesis of abdominal wall endometriosis is best explained by the iatrogenic direct implantation theory — during the surgical procedure, endometrial tissue is seeded into the wound. One of the other theories suggests that the postoperative scar endometriosis risk increases when the visceral or parietal peritoneum remains open during the surgery [4]. However, this theory alone is not enough to completely explain the pathophysiology given the low incidence of this disease and the reports on scar endometriosis without previous surgery. Coelomic metaplasia, lymphatic dissemination, or hematogenous dissemination may also be responsible for the disease. The lesions are mainly treated by surgical excision. The alternative methods to surgery are oral contraceptives, progestins, medroxyprogesterone acetate, or GnRH agonists. However, recurrences after the medical treatments may still occur. We did not administer any medical therapy after the operation, because the endometriotic lesions were removed surgically with a wide excision providing clear margins in all patients.

Conflicts of interest: All authors declare no conflicts of interest.

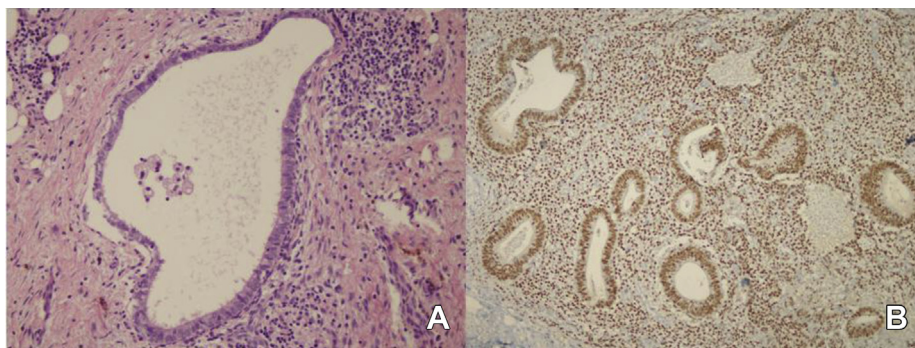


Figure 1. Endometrial glands have a similar appearance; endometrial epithelium is seen in the stroma: (A) hematoxylin and eosin (H&E), $\times 20$; (B) Estrogen receptor (ER), $\times 10$.

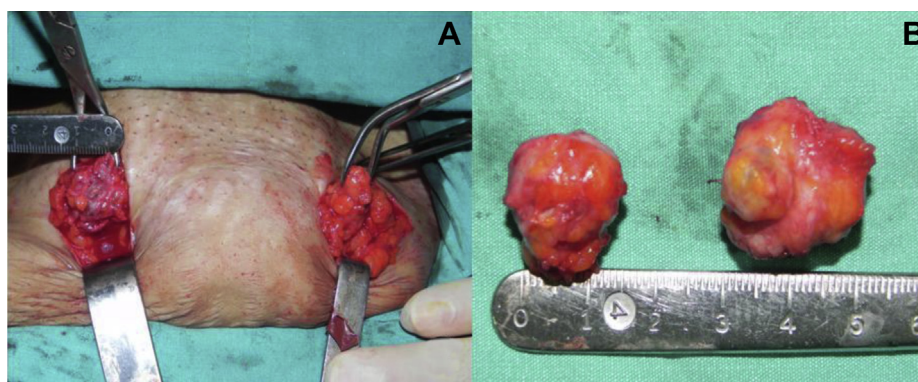


Figure 2. Endometriosis on the cesarean scar: dissection and excision of (A) bilateral lesion and (B) after resection.

Table 1 Clinical features of patients.

Age (year)	Location	Diameter (cm)	Surgical history	Duration of complaint (mo)	CA-125 (U/mL)
27	Bilateral	2–3.1	1 CS/70 months ago	34	34
27	Unilateral—right	2.4	1 CS/40 months ago	18	25
25	Unilateral—right	4	1 CS/46 months ago	12	42
36	Unilateral—left	3.2	2 CS/60 and 90 months ago	14	20
26	Unilateral—left	2	1 CS/30 months ago	11	31

CS = cesarean section.

In conclusion, abdominal wall endometriosis should be kept in mind for females complaining of mass or pain in or around the scar after a cesarean section or hysterectomy. It is a rare entity; however, its incidence may arise because of the increasing number of cesarean procedures being performed.

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