Scar Endometriosis After Cesarean Section: A Case Report

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ABSTRACT:
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Objective: Endometriosis is the presence of functional endometrial gland and stromal tissue outside of the uterine cavity by the stimulation of ovarian hormones. The most common presenting symptoms are the abdominopelvic pain, dysmenorrhea, menstrual irregularities and infertility. Endometriosis is usually found in pelvis; however, it can appear in extrapelvic tissues such as the scar tissues, eyes, lungs, umbilicus, gallbladder, liver, skin and abdominal wall. Here we present a case of scar endometriosis developed after Cesarean section.
Case: 37 year-old woman with a prior history of Cesarean section presented with complaints of chronic pain on her scar tissue and a palpable mass. Abdominal ultrasonography and magnetic resonance imaging showed heterogeneous mass with increased vascularity. Surgical excision was performed and the specimen was reported pathologically as endometriosis.
Conclusion: In the evaluation of masses with a close location to the incision line of patients with especially previous history of operation, periodically increasing pain with menstrual cycles should be questioned and diagnosis of endometriosis should be kept in mind.
Keywords: Endometriosis, Cesarean section, scar

INTRODUCTION

Endometriosis is the presence of functional endometrial gland and stromal tissue outside of the uterine cavity by the stimulation of ovarian hormones. Theories about etiology such as metaplasia, retrograde menstruation, lymphatic metastasis and mechanical transplantation have been proposed. Being more frequent in women of reproductive age, the average frequency of occurrence is 10-15% (1). The most common symptoms are abdominopelvic pain, dysmenorrhea,
dyspareunia, menstrual irregularity and infertility. It may also be seen at ovaries, sacrouterine ligaments, peritoneum, rectovaginal septum and Douglas pouch in the pelvic region. It usually appears as pelvic endometriosis, but also may appear in extrapelvic tissues such as the scar tissues, eyes, lungs, umbilicus, gallbladder, liver, skin and abdominal wall (2). The incidence of endometriosis in the abdominal wall is 0.03% to 1.7%. The scar endometriosis manifests itself by a palpable abdominal mass in women with surgical history and increased cyclic pain or change of size due to cyclic hemorrhage during periods of menstruation (3). Scar endometriosis is most commonly seen after Cesarean section and the first Cesarean scar endometriosis case was reported in the literature in 1975 (4). We aimed to present our case which was operated due to a mass in the incision area following Cesarean section and diagnosed as endometriosis pathologically.

CASE

Thirty-seven-year-old, with an obstetric history of gravida 3, para 1, abortus 2 was admitted with painful swelling in the right upper quadrant of the old Cesarean scar for about 1 year, which was growing gradually. Patient expressed that pain increased especially during menstruation periods. The anamnesis of the patient revealed that the patient had a Cesarean operation 5 years ago, and had no pelvic endometriosis history or other disease. On physical examination; a hard painful subcutaneous mass of approximately 3x3 cm in size, palpated on the upper right side of the Cesarean incision scar was detected. The uterus and ovaries were normal in the gynecological examination. Other system examinations were normal. Ultrasonographic superficial evaluation of the anterior wall of abdomen revealed a 29x29 mm heterogeneous, vascularized solid lesion with irregular borders. The patient’s laboratory tests were normal. Pelvic magnetic resonance imaging (MRI) imaging was requested. The MRI revealed a lesion of about 1.5x2 cm in the right anterior wall of the pelvis with contrast enhancement, including the transverse fascia, and was associated with the fascia of the muscles at the transition point of the rectus and oblique muscles posteriorly, but not showing invasion, and

Figure-1: The mass was totally excised under general anesthesia with a clear surgical margin of 1 cm and sent for pathologic examination.

Figure-2: Endometriosis focus with endometrial glands in the muscle fibers and endometrial stromal tissue in the surrounding.
histopathological examination was suggested. The mass was totally excised under general anesthesia with a clean surgical margin of 1 cm and the specimen was sent to pathological examination (Figure-1). The defect was restored primarily.

The case was discharged without any problems on the first postoperative day. Histopathological evaluation of the case revealed endometriosis with endometrial glands in the muscle fibers with endometrial stromal tissue in the surrounding (Figure-2).

**DISCUSSION**

The type of endometriosis outside the pelvis, which is defined as the occurrence of endometrial tissue outside the uterine cavity, accounts for 8.9% of all endometriosis cases. Of these, 4% form cutaneous endometriosis (5). Abdominal wall endometriosis is seen in the skin, subcutaneous tissues, incision scar, umbilicus, and rectus abdominis muscle. The incidence of post-surgical events, like Cesarean section, is 0.1% (6). Minaglia et al. (7) found scar endometriosis rate after Cesarean section as 0.08%. Oliveria et al. (8) showed that hysterectomies performed before the 22nd week of pregnancy are the most important risk factors for scar endometriosis. In another study, the incidence of scar endometriosis seen after second trimester abortions was 5.08%, while it was found to be between 0.03%-0.4% after Cesarean section (9). Endometriosis was detected at the Pfannenstiel incision line in 44% of the 34 patients with extragenital endometriosis diagnosis (5). The strongest theory in the formation of scar endometriosis is the direct inoculation of endometrial cells to subcutaneous tissue and abdominal fascia (10).

Increased pain and enlargement of the mass in the course of menstruation in abdominal wall endometriosis, would be helpful in diagnosis (11-15). These symptoms are present in 50% of patients. We had a similar complaint in our case. The site of endometriosis is usually the left side of the incision line (16). In our case differently, the endometriosis site was located on the right side of the incision. Although definitive diagnosis of endometriosis is made histopathologically, ultrasonography (USG), color Doppler USG, computerised tomography (CT) and MRI may be helpful in evaluating the location, size, density, homogeneity, and assessment of differentiation from the muscle planes and surrounding tissues (17). Frequently USG and MRI are the recommended diagnostic methods. We also requested USG and MRI from our case. In the medical treatment of scar endometriosis with medications such as progesterone or danazol, since the symptoms tend to recur, it is suggested that the lesion should be surgically removed at least 1 cm from the surrounding tissue to prevent recurrence. If the remaining space after the removed tissue is large or if a facial defect is seen, it can be repaired with a mesh (18). We performed total excision in our case. We performed primary repair, and did not apply a mesh because the defect was not large. The possibility of recurrence after surgery is rare and usually occurs within the first year (13).

In conclusion, especially in the evaluation of masses located close to the incision lines of patients with history of operation; increasing pain complaints during menstrual periods should be questioned and endometriosis should be kept in mind. These cases of scar endometriosis should be performed broad excision to prevent surgical recurrences.
REFERENCES

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