Abdominal wall endometriosis after a caesarian section - an interesting case report

A. Chatziparadeisi[1], A. Daniilidis[1], S. Diavatis[1], N. Vrachnis[2], F. Carcea[1], C. Giannoulis[1]

[1]2nd University Clinic of Obstetrics and Gynecology, Aristotle University of Thessaloniki, Hippokratio General Hospital, Thessaloniki
[2]2nd University Clinic of Obstetrics and Gynecology, Areteio General Hospital, Athens (Greece)

Summary

Background: Endometriotic foci can be rarely found on the surgical incision following caesarean delivery and on perineotomy site following vaginal delivery. *Case:* A 33-year-old woman with a history of caesarian section five years prior was admitted to the present clinic due to right groin pain with increasing intensity during menstruation. Ultrasound revealed an endometrioma-like subcutaneous mass directly under the right edge of the Pfannenstiel scar. The mass (3.5 x 2.4 x 2 cm) was removed en bloc with ultrascissor. *Conclusion:* The prevailing argument supports that it is a complication caused by the iatrogenic dispersal of endometrial material. Symptoms onset vary from one to five years postoperatively and mainly include pain and enlargement of the mass during menstruation. Diagnosis may be demanding due to the atypical presentation of the disease. Symptoms exacerbate during menstruation in only 20% of all cases. Abdominal ultrasound is extremely useful for diagnosis. The treatment of choice is surgical excision.

Key words: Endometriosis; Caesarian section; Infertility.

Introduction

Endometriosis is an estrogen-dependent, benign gynaecologic disorder, characterized by the ectopic presence of endometrial tissue that is morphologically and biologically similar to eutopic endometrium. It mainly affects women of reproductive age, regardless of race or social status [1, 2].

Endometriosis is most commonly found on the ovaries, fallopian tubes, uterine ligaments, and pelvic peritoneum. Less common sites include the bladder, bowel, cervix, rectum, vagina, and vulva. Rarely, endometriosis can be found in distant organs such as the lungs, brain, diaphragm, kidneys, spleen, gallbladder, nasal mucosa, spinal canal, stomach, breast, and skin. Endometriotic foci have also been found on the surgical incision following caesarean delivery and on perineotomy site following vaginal delivery. These cases are known as "scar endometriosis" (incidence 0.03% - 1.5%) [3-5].

The authors present an interesting case report of endometriosis diagnosed on caesarian section scar of a woman who delivered five years prior. They also present a brief review of the literature regarding this rare manifestation of the disease.

Case Report

A 33-year-old woman attended the gynecology outpatient clinic complaining of right groin pain, which initiated one year prior and exacerbated during the last three months. She had two vaginal deliveries and a caesarean section performed five years prior.

On clinical examination, a painful, hard, irregular 2 x 2 cm mass directly under the right edge of the Pfannenstiel incision was easily palpated. Routine blood and biochemical tests and CA-125 were normal. Pain intensity and mass size was increasing during menstruation. Ultrasound revealed a compact, round, hypoechoic subcutaneous mass (18.8 x 14.9 mm), above the fascia of the rectus abdominis muscle, with endometrioma-like imaging (Figure 1A). There were no other pathological findings. Further investigations with magnetic resonance imaging (MRI) or computed tomography (CT) were not considered necessary.

A small incision was performed at the right sight of the Pfannenstiel scar. A subcutaneous mass (3.5 x 2.4 x 2 cm) of hard texture and irregular shape, firmly attached to the surrounding fatty tissue was removed en bloc with ultrascissor (Figure 1B). Histology came back as endometriosis. Postoperative course and hospitalisation were uneventful. The patient was discharged the following day with a prescription of six months with oral dienogest. On her follow up appointments at six months postoperatively, there were no clinical signs of any further disease.

Discussion

Post-surgery scar endometriosis is a very rare condition. Its incidence after a caesarian section is 0.03% - 1.5% [5, 6]. The prevailing argument supports that it is a complication caused by the iatrogenic dispersal of endometrial material at the incision site [7]. Similarly, the disease can be rarely found at the perineum following vaginal delivery. Symptoms onset vary from one to five years postoperatively and mainly include pain and enlargement of the mass during menstruation.

Diagnosis may be quite demanding due to the atypical nature and presentation of the disease. Symptoms are exacerbated during the menstrual cycle in only 20% of all cases [5, 7, 8]. Differential diagnosis needs to exclude suture granuloma, abscess collection, lipoma, inguinal or postoperative hernia, femoral hernia, and primary/metastatic cancer. Abdominal ultrasound is extremely useful for di-

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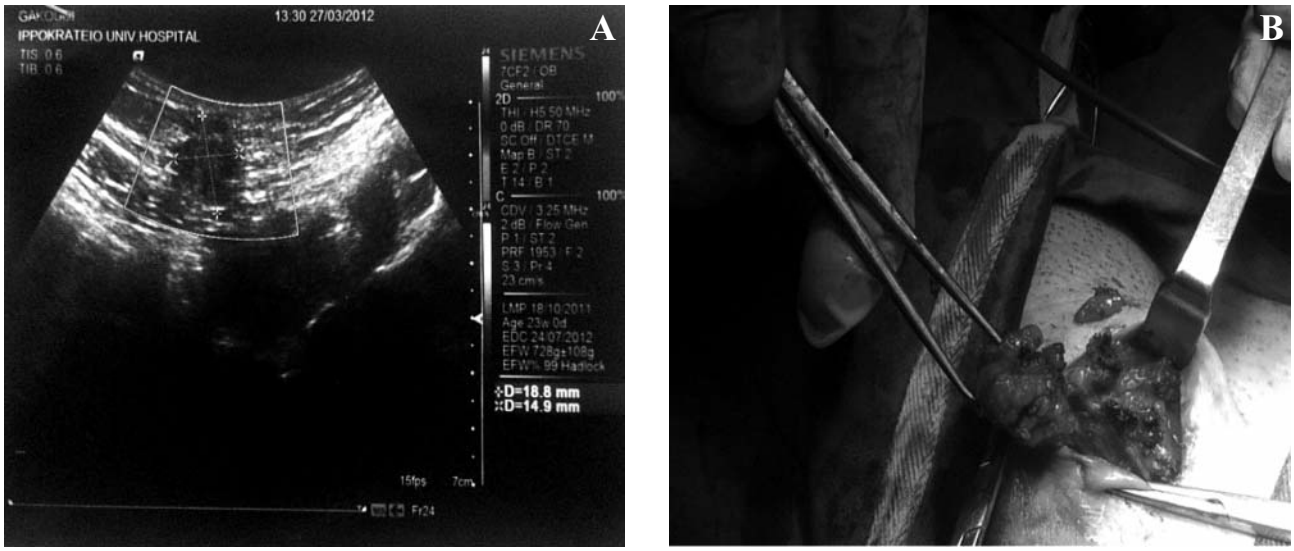

Figure 1. — A) Ultrasound image demonstrating a compact, round, hypoechoic subcutaneous mass (18.8 x 14.9 mm). B) Mass (3.5 x 2.4 x 2 cm) of hard texture and irregular shape, firmly attached to the surrounding fatty tissue.

agnostic purposes. Ultrasound image reveals a round, hypoechoic, area with fibrous elements surrounded by an inflammatory, echogenic ring [3, 9]. Usually, there is no need for further CT or MRI investigation. Final diagnosis is always established by histological confirmation.

The incidence rate of malignant transformation following endometriosis is 0.6% - 1.0% and it usually concerns the ovarian localization of the disease (80% of cases). As for other localizations, about four percent were found on surgical incision. The most frequent types of ovarian malignancies are endometrioid adenocarcinoma (69%) and vitreous cancer (14%). Extra-ovarian transformation of endometriosis usually results in vitreous cancer and adenosarcoma [4, 10]. The treatment of choice for subcutaneous endometriosis is extended surgical excision of the mass. Progestogen, contraceptive or danazol treatment offer temporary relief from symptoms before treatment, and perhaps small reduction of the endometriotic mass. Post-surgery management with pharmaceutical agents is not compulsory and its significance for these kinds of complications is not actually established.

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Address reprint requests to:
A. DANIILIDIS, M.D.
Aristotle University of Thessaloniki,
9 Smirnis, 56224 Evosmos,
Thessaloniki (Greece)
e-mail: angedan@hotmail.com