

## CONTINUING MEDICAL EDUCATION ΣΥΝΕΧΙΖΟΜΕΝΗ ΙΑΤΡΙΚΗ ΕΚΠΑΙΔΕΥΣΗ

### Surgery Quiz – Case 6

A 36-year-old woman came to our observation complaining of intense pain and palpation of small bulky mass in the area of the cesarean scar for the last one year. The patient was referred by her gynecologist with the possible-questionable diagnosis of postoperative scar hernia. She had two vaginal births 10 and 8 years, and one cesarean delivery 1 year ago. Physical examination revealed on an otherwise healthy woman, three painfully masses on the left half side of a normal appearing cesarean scar. The patient reported that the pain was more intense on the middle of the cycle. The sizes of the bulks were approximately 3×3, 2×2, 1×1 cm. A transabdominal ultrasound was ordered, first, and showed three hypoechoic masses on the anterior rectus sheath. The followed CT-scan of the abdomen showed similar findings (fig. 1). Thorax x-ray and blood count were normal.

The patient was scheduled for operation. Under general anesthesia the three bulky masses were excised (fig. 2) separately, leaving a small opening on the aponeurosis of the rectus muscle, which was primary repaired with non absorbable suture (fig. 3). The postoperative course was uneventful. Histopathology confirmed the diagnosis of endometriosis.

#### Comment

*Endometriosis, a benign but debilitating and poorly understood gynecological condition, is characterized by the presence of endometrium-like glands and stroma outside of the uterus. The disease occurs in 7–10% of women in general population, with a prevalence rate up to 50% in woman with infertile problems and up*

*to 80% in woman with chronic pelvic pain. Extrapelvic manifestation of the disease is observed in approximately 12% of women with endometriosis. Although every organ can be affected, the surgical scar is the most common site of extrapelvic endometriosis. Scar endometriosis or scar endometrioma develops in or adjacent the area of surgical incisions for not only gynecological operations, but also at the port sites after laparoscopic gastric bypass and cholecystectomy, due to mechanical transplantation.*

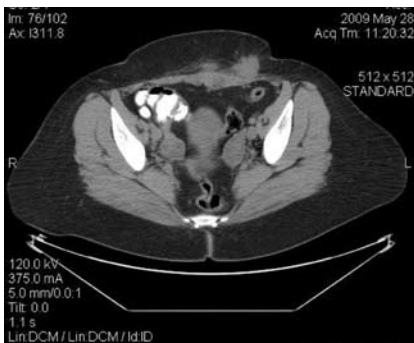
*Scar endometrioma is presented as a lump palpated on or near by the surgical scar, most commonly a cesarean incision. Pain is a main symptom, and if cyclical, as in endometriosis, almost pathognomonic for the diagnosis. If not suspected, scar endometriosis can be confused with hernia, suture granuloma, scar tissue, abscess or even metastatic carcinoma. The various imaging methods such as ultrasound, computer tomography or magnetic resonance tomography can differentiate –at best– between a hernia and a nodule of the abdominal wall, but any uniformly description of the characteristics of the appearance of a scar endometrioma on ultrasound, and or MR or CT are lacking. Although the role of fine needle aspiration biopsy remain controverse, it could be used preoperatively to differentiate between malignant and benign lesions.*

*The incidence of incisional hernia after cesarean delivery is reported to be 3% whereas that of scar endometrioma varies between 0.03% and 0.15%, explains the common scenario of referral of a woman with a palpable and painful bulky mass on her cesarean*

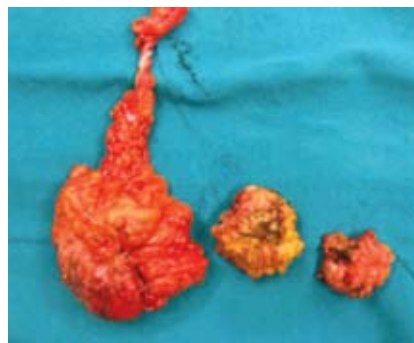
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**Figure 1.** CT abdomen: Endometrioma-like masses (arrow) on the anterior rectus sheath aponeurosis.



**Figure 2.** Surgical specimens of three scar endometriomata.



**Figure 3.** Operation field after the excision of the largest of three scar endometriomata.

scar, by her gynecologist to the general surgeon.

*Wide surgical excision of scar endometrioma, even if this necessitates a wide excision of the fascia, is the treatment of choice.*

*In summary, a careful history and good physical examination are the cornerstones of the diagnosis of scar endometrioma. Imaging procedures do help in terms of differentiating, but not of confirming the diagnosis. The usefulness of preoperative diagnosis with fine needle remains uncertain. In our opinion, if scar endometrioma is suspected then the most reasonable step is to be operated, after obtaining a transabdominal ultrasound, in order to excise the palpable lesion, without any further preoperative work-up.*

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