

# Cesarean Section Scar Nodule, Ovarian Cyst, and Dysmenorrhea

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## SECTION 1 – QUIZ

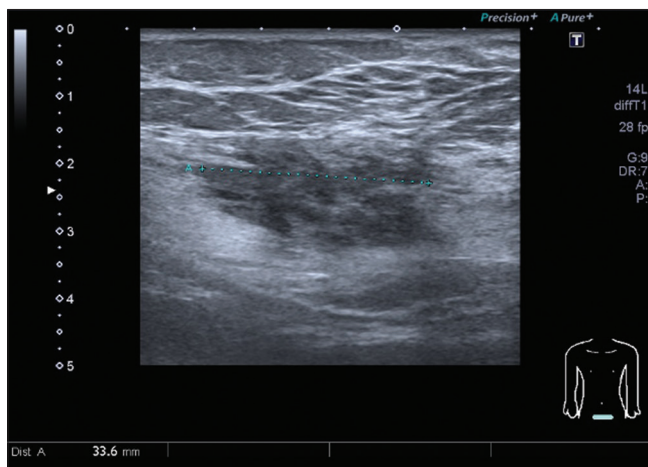
### Case description

A 38-year-old female was admitted in the gynecology outpatient's clinic due to secondary infertility. She was Gesta I Para I, with one previous uneventful pregnancy and a cesarean section 7 years before. She had hypothyroidism and was medicated with levothyroxine 150 µg. As soon as she left the combined pill in order to conceive, she started complaining of severe dysmenorrhea (pain score: 8/10). At physical examination, a hard and painful nodule was palpable at midline, under the cesarean section scar. She had a nonmobile uterus. A painful hard mass was palpable at rectal digital examination, 3 cm away from the anus.

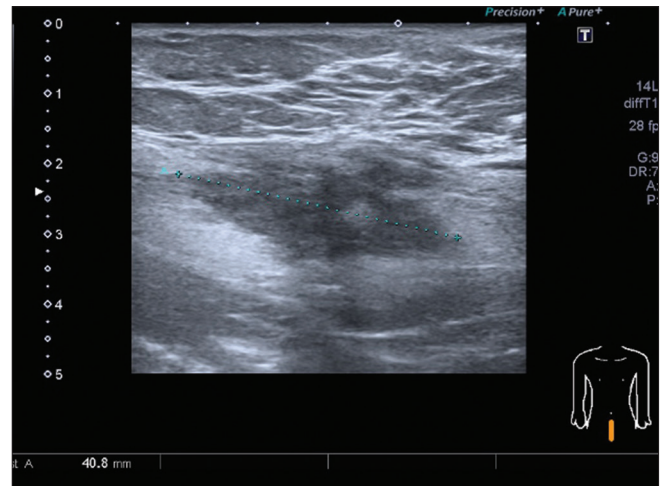
Abdominal wall soft tissue ultrasound revealed a nodule of heterogeneous echogenicity with 41 mm × 34 mm × 17 mm located medially at the level of the rectus abdominis muscle, under the cesarean section scar [Figures 1-3]. Abdominal

magnetic resonance imaging confirmed the presence of a nodule with 4.9 cm × 3.8 cm × 2.0 cm on the rectus abdominis muscle and its fascia [Figures 4 and 5]. Pelvic transvaginal ultrasound revealed normal uterus and right adnexa and a cyst at the left ovary with 30 mm × 26 mm, with no septa or solid components and with ground glass echogenicity.

The patient was submitted to laparotomy. During surgery, a hard median nodule with 5 cm of length was found located in the rectus abdominis muscle and its fascia [Figures 6 and 7]. Pelvic anatomy was completely distorted with several adhesions between the uterus, the adnexa, colon, and pelvic wall. The left adnexa was involved in adhesions, the left tube



**Figure 1:** Abdominal soft tissue ultrasound in the axial plane revealing abdominal wall nodule



**Figure 2:** Abdominal soft tissue ultrasound in the sagittal plane revealing abdominal wall nodule

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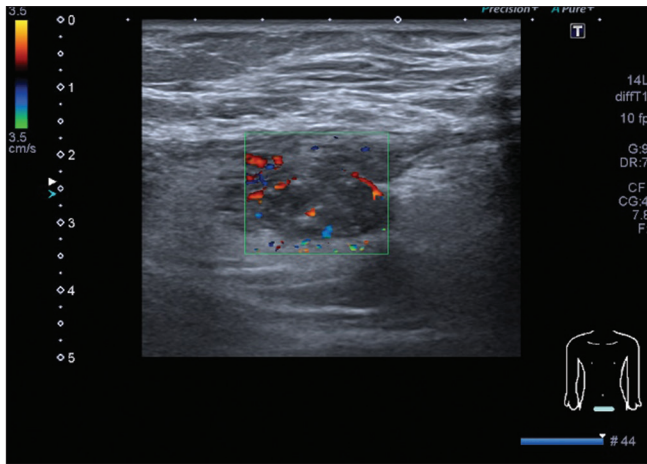
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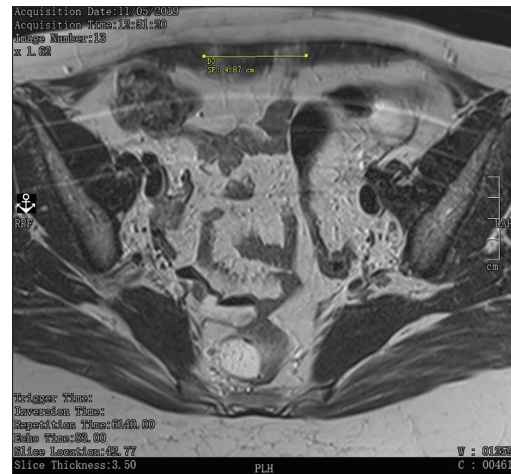
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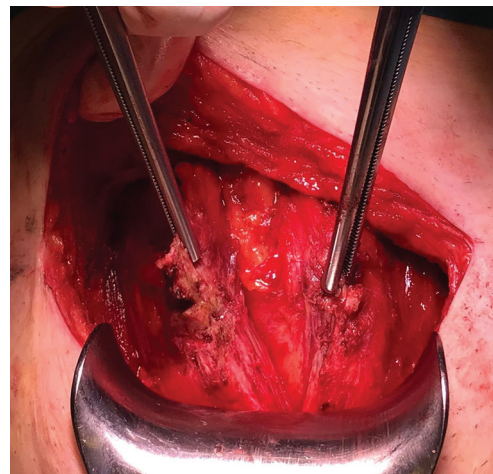
**Figure 3:** Abdominal soft tissue ultrasound in the axial plane with color Doppler revealing vascularized abdominal wall nodule



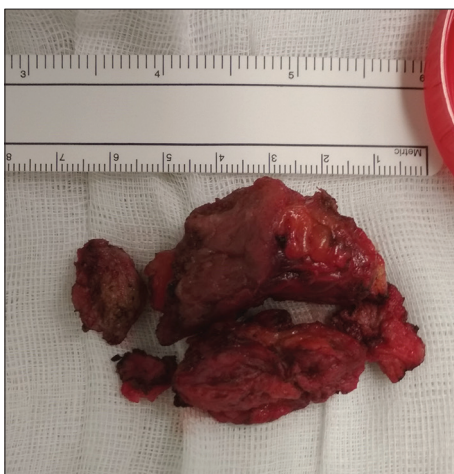
**Figure 4:** Abdominal magnetic resonance imaging in the axial plane revealing abdominal wall nodule



**Figure 5:** Abdominal magnetic resonance imaging in sagittal plane revealing abdominal wall nodule



**Figure 6:** Hard median nodule involving both rectus abdominis muscles and fascia (*in vivo* picture)



**Figure 7:** Hard median nodule with 5 cm length removed from the rectus abdominis muscles and fascia (*ex vivo* picture)

was enlarged, and there was a 3 cm cyst in the left ovary. The abdominal wall cyst was removed, and ovarian cystectomy,

left salpingectomy, and contralateral tubal patency test were performed. The ovarian cyst had a dark brown thick liquid inside. Despite the adhesions, the right adnexa was normal and the right tube was patent.

## WHAT IS THE DIAGNOSIS?

### Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient has given her consent for her images and other clinical information to be reported in the journal. The patient understands that her name and initials will not be published and due efforts will be made to conceal identity, but anonymity cannot be guaranteed.

### Financial support and sponsorship

Nil.

### Conflicts of interest

There are no conflicts of interest.