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Presurgical Ultrasound Marking of a Nonpalpable Abdominal Wall Endometriotic Nodule

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Abdominal wall endometriosis (AWE) nodules are treated by complete surgical resection with recurrence rates between 4.3% and 9.1% [1−3]. Some of them are nonpalpable because of their size or a patient's high body mass index; therefore, presurgical marking technique is important [4,5].

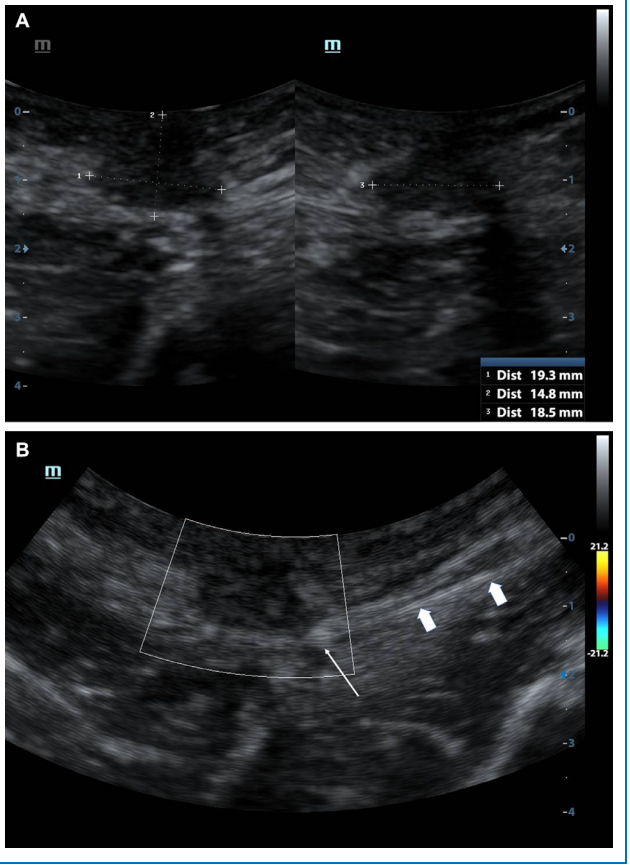
We report the preoperative marking ultrasound technique in 2 patients with symptomatic nonpalpable AWE.

We identified the lesion (Fig. 1A) with an ultrasound scanner (model DC 8; Mindray, Shenzhen, China), using a 5.0 MHz convex abdominal transducer. Aseptic precautions were used. With local anesthetic (2% lidocaine), under ultrasound vision, the guide wire (Accura 20 gauge × 10 cm; Angiotech Pharmaceuticals, Vancouver, Canada) was inserted obliquely at a 45° angle, targeting the lesion from lateral to medial trying to reach the nearest point at the center of the lesion (Fig. 1B). The guide wire is removed leaving the harpoon in the nodule. To describe the exact location for the surgeon, a pen skin mark was made at 90° from the nodule (Fig. 2). The distance between the nodule and the surface of the skin was also measured (Supplemental Fig. 1A) (Supplemental Video 1).

Both patients underwent surgical resection with concomitant laparoscopy. Complete removal of the nodule was performed leaving free macroscopic margins. In both cases, the nodule compromised the deep subcutaneous cell tissue, the aponeurosis, the rectus abdominis muscle, and the peritoneum (Supplemental Fig. 1B). Suture and hemostasis were checked by laparoscopy and pelvic endometriosis

Fig. 1

(A) Ultrasound view of the lesion 19 × 15 × 18 mm in case 1. (B) Location of the harpoon in the lesion of case 1, the *thick arrows* indicate the path of the harpoon, and the *thin arrow* indicates the tip of the harpoon.



The authors declare that they have no conflict of interest.

This study was approved by the institutional review board (institutional review board number 59/19).

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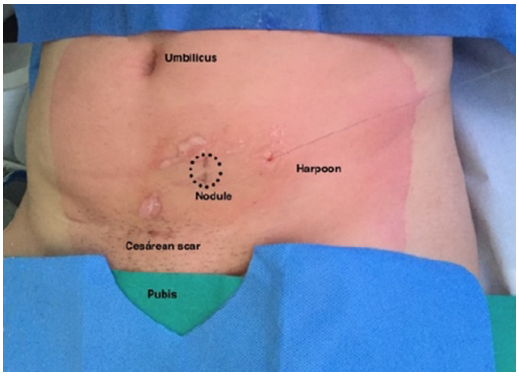
Fig. 2

Abdominal wall, dotted circle indicates the endometriotic nodule.



surgical treatment (Supplemental Figs. 2A and B). Both samples were collected for histopathologic study, which confirmed the diagnosis.

With the increase in cesarean section rate and population body mass index, the frequency of AWE nonpalpable nodules will probably augment. Marking the lesion is highly important for identification and complete surgical resection. We showed that this technique is effective and reproducible with the same facilities that most gynecologic units already have available.

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Supplementary materials

Supplementary material associated with this article can be found in the online version at https://doi.org/10.1016/j.jmig.2020.06.013.