## Hysteroscopic images of an isolated lesion of unknown origin in a young infertile patient

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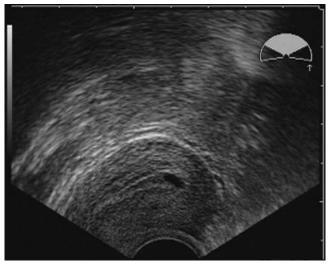
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A 23-year-old patient had symptoms of primary infertility of 20 months' duration. On cycle day 14, a vaginal ultrasound showed an endometrium of 9 mm with a normal triple-line pattern. In the fundus, a small (4-5 mm in diameter) oval-shaped, translucent area at the surface of the junctional zone, not surrounded by an echogenic border, was noticed (Figure 1). This image persisted throughout her cycle. The patient was scheduled for an endoscopic infertility investigation on cycle day 21 (β-human chorionic gonadotropin negative). The diagnostic hysteroscopy revealed a dark-blue cystic lesion on the anterior wall near the fundus, clearly covered by (or located within) the endometrium, showing increased vascularization (Figures 2, 3, and 4). The color originated from blood in the center of the lesion, and a biopsy of the bed of the lesion suggested the diagnosis of adenomyosis. Histology, however, revealed cytogenic stroma on a rim of myometrium (both without any sign of fibrosis), covered by a layer of proliferative endometrium (Figure 5).

In adenomyosis, fibrosis appears after at least three to five episodes of intramyometrial bleeding. So instead of adenomyosis, this focal and shallow lesion, bulging toward the uterine cavity, and therefore visible during hysteroscopy, could also correspond to a hemorrhagic glandular (retention) cyst of the basal endometrium. The endometrial biopsy showed a late proliferative-stage endometrium without signs of endometritis. Transvaginal laparoscopy and the tubal patency test were normal, without evidence of endometriosis or adhesions. The patient's partner had an isolated teratospermia twice, but he already has two children from a previous relationship. Six weeks after removal of this cystic lesion, a magnetic resonance image of the pelvis confirmed the presence of a normal uterine junctional zone thickness (Figure 6) without evidence of (focal areas of) adenomyosis. One month later, this patient became pregnant, with a spontaneous, ongoing intrauterine singleton pregnancy.

What is this lesion?

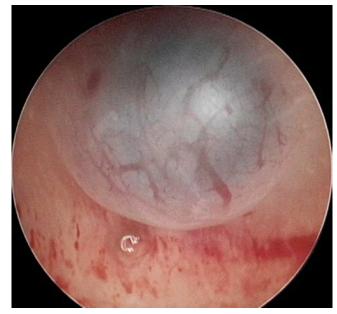
Editor



**Figure** Vaginal ultrasound reveals a small oval and translucent area of 4-5 mm at the fundus, not surrounded by an echogenic border.



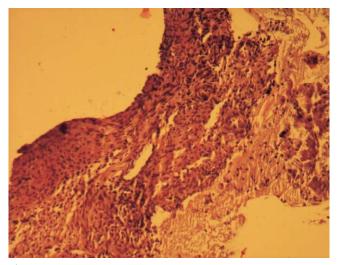
**Figure 2** Hysteroscopy discloses a dark blue cystic lesion on the anterior wall near the fundus.



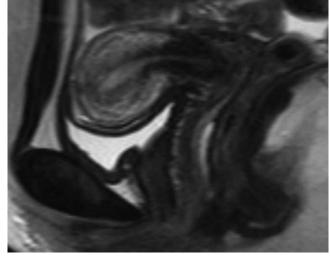
**Figure 3** The lesion is clearly covered by (or located within the) endometrium, which shows an increased vascularization.



Figure 4 The color originates from old, unclotted blood.



**Figure 5** Histologic image of cytogenic stroma on a rim of myometrium, covered by a layer of proliferative-stage endometrium. There were no signs of fibrosis.



**Figure 6** An MRI of the pelvis reveals the presence of a normal uterine junctional zone thickness without evidence of adenomyosis.