

Ultrasonographic findings and treatment in heterotopic cesarean scar pregnancy

A very rare case of heterotopic cesarean scar pregnancy highlights the potential for cesarean scar pregnancy in patients with a history of cesarean scar.

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History

A pregnant woman in her mid-30s presented to the emergency room with acute onset of back and pelvic pain and moderate spotting. The patient was gravida 4, para 2 (G4P2) and had had two prior cesarean sections. The pregnancy was conceived using letrozole as a fertility medication, which has a known twin risk of 3% to 7%.¹ Estimated gestational age was 5 weeks 3 days. Quantitative β -hCG level was 7190 mIU/mL at presentation and rose to 13 484 mIU/mL 2 days later.

Imaging findings

Ultrasonography showed a gestational sac with an embryo implanted in the endometrium near the fundus and an ectopic gestational sac within the cesarean scar niche [Figure].

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Discussion

Imaging findings of two gestational sacs, where one sac is implanted along the cesarean scar, suggests heterotopic cesarean scar pregnancy. The patient wished to keep the intrauterine gestation; thus, a selective reduction of the cesarean scar pregnancy by ultrasonography-guided local injection of methotrexate was performed. Despite this, the patient's β -hCG level continued to rise. Systemic treatment with methotrexate also failed to reduce the β -hCG level; therefore, a hysterectomy was performed. Heterotopic cesarean scar pregnancy was confirmed at pathology.

Heterotopic pregnancy is one of the rarest forms of multiple gestation, occurring in less than 1 in 30 000 naturally conceived pregnancies.² The incidence of heterotopic pregnancy increases with assisted reproductive techniques.³ Cesarean scar pregnancy is extremely rare and accounts for only 6% of all ectopic pregnancies; however, incidences are rising with cesarean section rates.⁴ Heterotopic cesarean scar pregnancy is a rare cesarean scar pregnancy combined with an intrauterine pregnancy.

Treatment for isolated cesarean scar pregnancy includes dilation and curettage, laparoscopic resection, and local or systemic administration of methotrexate.⁵ Because of the low incidence of heterotopic cesarean scar pregnancy, no standard treatment protocols have been established.

Ultrasonography-guided selective embryo aspiration and/or drug injection and surgical resection have been described.⁶ ■

Competing interests

None declared.

References

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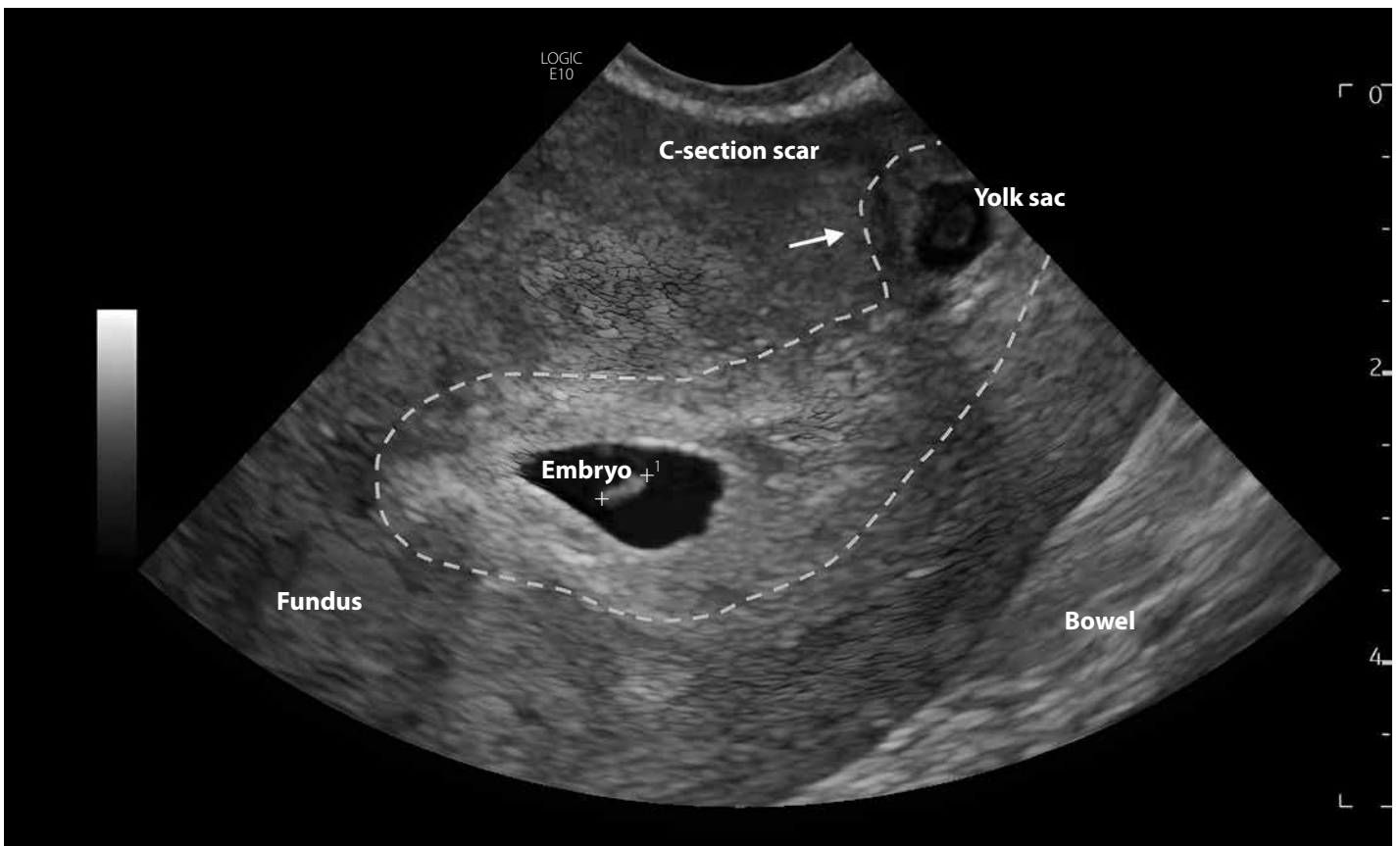
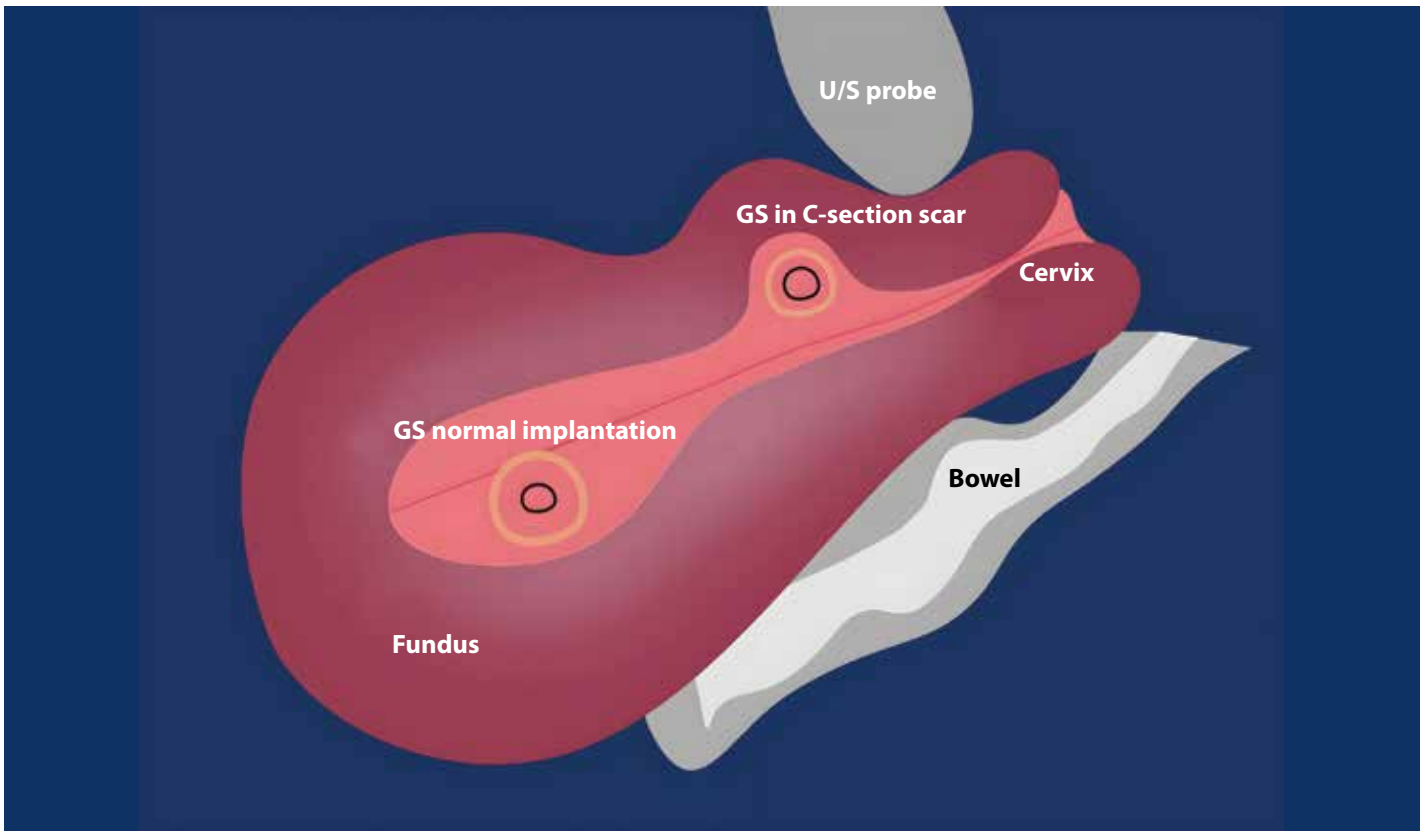


FIGURE. Sagittal transvaginal grayscale image of the uterus, showing two gestational sacs, with a clarifying graphic above. An embryo is present in the gestational sac, normal implantation; a yolk sac is present in the ectopic cesarean scar gestational sac (arrows). U/S = ultrasonography; GS = gestational sac.