Beware the scar

Laparoscopic hysterectomy for 7-week cesarean delivery scar implantation pregnancy

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Case notes

A 36-year-old G4P2012 at 6 weeks by last menstrual period presented to the emergency department with abdominal pain and vaginal bleeding. On examination, she had normal vital signs with mild suprapubic tenderness without rebound or guarding. Her medical history was notable for 2 uncomplicated cesarean deliveries.

Ultrasound imaging showed implantation of a 7-week gestation within the endometrium overlying the prior cesarean delivery scar with thin adjacent myometrium. The serum human chorionic gonadotropin (hCG) was 155,009 mIU/mL. Due to the rare nature of cesarean delivery scar implantation pregnancies, there are no standardized guidelines for management. After extensive counseling regarding surgical management vs medical management with intraamniotic KCl injection and multidose methotrexate, the patient opted for medical management.[1,2] She was admitted to the gynecology service after undergoing intraamniotic KCl 6-mEq injection under ultrasound guidance with confirmed cessation of the fetal heartbeat. The patient then received 4 doses of methotrexate (1 mg/kg intramuscularly) with a 5-mg leucovorin 'rescue' on alternating days. Following an initial decline in serial hCGs, the hCG plateaued and never fell below 131,000 mIU/mL. Dilation and curettage was not offered after reviewing the imaging given

FIGURE 1

Ultrasound showing implantation of 7-week gestation in cesarean delivery scar

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FIGURE 2

Uterus with pregnancy located in the cesarean delivery scar after TLH

TLH, total laparoscopic hysterectomy.

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concern for perforation in the setting of minimal myometrium separating the implantation and the bladder (Figure 1).

The patient was offered excision of the cesarean delivery scar implantation with wedge resection vs total laparoscopic hysterectomy (TLH). This was an undesired pregnancy and she did not desire future fertility, thus she opted for definitive surgical management with a TLH. She underwent an uncomplicated TLH and was discharged on postoperative day 1 (Figure 2).

Comment

In 2012, the cesarean delivery rate in the United States was 32.8% while the rate in other developed countries was 21.1%.[3,4] The only risk factor for a cesarean delivery scar implantation is a history of cesarean delivery. While these pregnancies are still rare, occurring in about 1 in 2000 pregnancies of women with a prior cesarean delivery and account for 6% of ectopic pregnancies, the increasing incidence of cesarean deliveries in the United States may lead to a higher incidence of cesarean delivery scar implantation in the future.[5] Management of advanced pregnancies in the setting of a prior hysterotomy poses unique medical and surgical challenges, and data remain limited in guiding treatment. ■

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