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Asymptomatic uterine dehiscence in a second-trimester twin pregnancy

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Case notes

A 22-year-old woman with dichorionic-diamniotic twins and a history of cesarean delivery for breech presentation presented for routine anatomy ultrasound. She was found to have a 2-cm defect in the lower uterine segment at the cervical junction, likely at the site of her previous hysterotomy (Figure 1). On endovaginal scan, there was sludge within the defect that extended through the myometrium, covered only by serosa. A fetal foot intermittently kicked through the defect (Video). Magnetic resonance imaging confirmed the dehiscence at least 3 cm from the inferior margin of her anterior placenta adjacent to the normal-appearing bladder; there was no maternal free fluid (Figure 2). She was asymptomatic, however she was admitted at 19 weeks and 4 days for observation given concern for catastrophic rupture as the pregnancy progressed. At 21 weeks and 2 days, she ruptured her membranes, began painfully contracting, and a fetal foot was protruding through the cervical os. The patient was hemodynamically stable, however, due to her tightly contracted cervix around the fetal foot, the decision was made to perform an emergent exploratory laparotomy. A classic hysterotomy was performed to deliver the twins, who were not resuscitated due to their early gestational age. This defect was repaired with a single layer of 0-Vicryl (Ethicon Inc., Blue Ash, OH) in a running locked fashion to reapproximate the myometrium.

Conclusions

Uterine rupture prior to labor is rare, as women who plan a repeat cesarean delivery have a risk of uterine rupture without labor of approximately 0.16%.¹ The largest series of women who experienced second-trimester uterine dehiscence consists of 6 women who underwent surgical repair using collagen fleece, and delivered at 33 weeks.² These women were all symptomatic with rupture, favoring intervention over expectant management. There is no consensus on management of asymptomatic second-trimester rupture. The limited available data describe a spectrum of management options including pregnancy termination, expectant management, or surgical repair.^{3,4} There are few reports of uterine dehiscence in twin

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pregnancies, and little evidence to suggest the possibility of predicting recurrence of uterine rupture, but subsequent pregnancies can be uncomplicated if delivered before the onset of labor.^{5,6}

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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FIGURE 1. Ultrasound images

A, Dichorionic-diamniotic twin pregnancy with anterior placenta (a). Transvaginal ultrasound showing **B**, uterine dehiscence with amniotic membrane protruding through defect (d) and **C**, defect (d) in relation to cervix (e). **D**, Membranes protruding through defect (d).

b, bladder; *c*, fetal foot.

FIGURE 2. Magnetic resonance imaging
T2 weighted, showing twin pregnancy with defect (d).
a, presenting fetus; *b*, bladder; *c*, nonpresenting fetus.