

CLINICAL IMAGE

Stinging abdominal pain at 32 gestational weeks with prior classical uterine incision: Careful assessment or emergency cesarean delivery?

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Abstract

The risk of uterine rupture in subsequent pregnancy is 1%-12% in patients with prior classical uterine incision. Management of mild/moderate abdominal pain without an obvious abnormal finding before 36 weeks is challenging owing to fetal immaturity.

KEYWORDS

classical uterine incision, uterine rupture

1 | CASE NOTES

Prior classical uterine incision is linked to a high rate of uterine rupture. Abdominal pain may be a uterine rupture symptom, but the management for stinging pain occurring at 32 gestational weeks without apparent abnormal finding remains uncertain. Herein, we present a related case with meaningful images.

A 41-year-old woman at 32 gestational weeks with prior classical uterine incision complained of stinging lower right abdominal pain with normal vital signs and fetal heart rate. Uterine dehiscence and intra-abdominal bleeding were detected by contrast computed tomography (2 hours after the first pain) (Figures 1A-B), thereby diagnosed as uterine rupture. Hence, the patient underwent an emergency cesarean

delivery (CD) (3.5 hours after the first pain) of a female infant weighing 1746 g with Apgar scores of 8 and 7, at 1 and 5 min, respectively. Laparotomy revealed amniotic membrane protrusion from the anterior uterine wall (Figure 1C). Both the mother and the infant recovered well and were eventually discharged.

Uterine rupture correlates with high fetal mortality rates (26.2%).¹ In classical uterine incision, the risk of uterine rupture is 1%-12%,² which is rather high, considering the overall risk of 0.1%-0.5% for patients with prior CD. In prior classical CD cases, 70% of uterine ruptures occur at <36 gestational weeks and are associated with high fetal mortality rates caused by rapid fetal deterioration.² Fetal immaturity at <36 gestational weeks complicates the management of mild-to-moderate abdominal pain—either immediate CD or careful monitoring—especially without abnormal findings.

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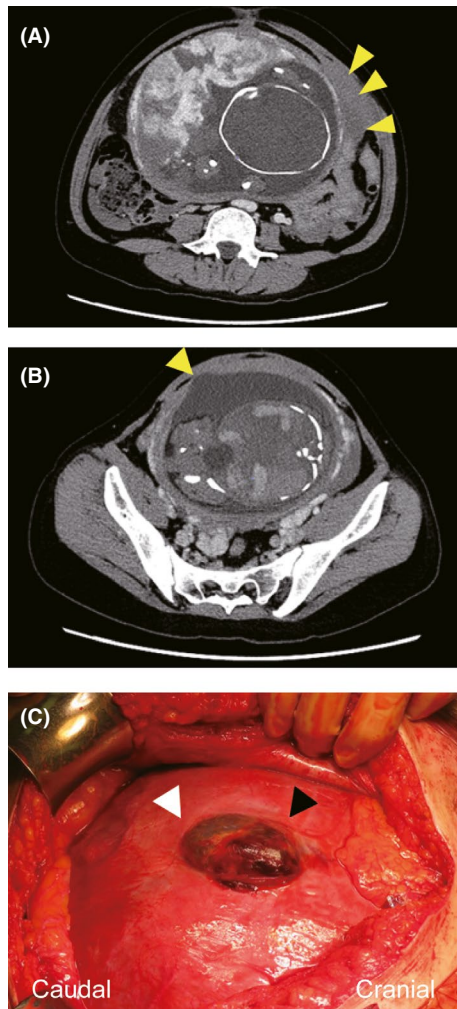


FIGURE 1 A, Abdominal contrast computed tomography revealed a small amount of intra-abdominal bleeding (yellow arrows), which was not detected by transabdominal ultrasonography. This finding suggests the cause of abdominal pain. B, Uterine dehiscence in the middle of the uterine body was detected through careful monitoring; the suspected cause was a scar from prior classical uterine incision. Uterine dehiscence and bleeding indicate uterine rupture; thus, an emergency cesarean delivery was performed. C, Intraoperative laparotomy imaging confirmed the presence of uterine scar dehiscence and bleeding; the maternal head is visible on the right. Amniotic membrane protrusion (white arrow) and the lower edge of the placenta (black arrow) are visible from the anterior uterine wall

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None.

CONFLICT OF INTEREST

All authors declare no conflicts of interest related to this study.

AUTHOR CONTRIBUTIONS

AK, SM, YK, and TK (Toshihiro Kimura): made substantial contributions to the conception and design of this manuscript, collected the clinical data, and drafted and revised the manuscript. TK (Tadashi Kimura): conceived and generally supervised the study and gave final approval for publication of this manuscript. All authors read and approved the final manuscript.

ETHICAL APPROVAL

This study conforms to the Declaration of Helsinki and is approved by the Osaka University Institutional Review Board (no. 15240).

DATA AVAILABILITY STATEMENT

The dataset used in the current report is available from the corresponding author on reasonable request.

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