

From Focal to Near Fatal: Recurrent Placenta Accreta Spectrum Leading to Early Second-Trimester Uterine Rupture

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A conservatively managed placenta accreta recurred in a subsequent pregnancy & ruptured the uterus at 14wks, a full week after warning signs appeared.

BACKGROUND

Placenta accreta spectrum (PAS) is abnormal placental adherence to or invasion of the myometrium (accreta, increta, percreta), preventing spontaneous placental separation and causing hemorrhage, massive transfusion, DIC, and hysterectomy.

Risk scales with uterine surgery: 0.3% after one cesarean, 6.74% after five or more, and higher still with placenta previa.

Conservative management trades morbidity for recurrence. Cesarean hysterectomy remains recommended; uterine-sparing management preserves fertility but carries an increased rate of recurrent PAS.

Early rupture is exceedingly rare. Rupture has an incidence of 0.9–3.7% and typically occurs in the third trimester, with prior hysterotomy the dominant risk factor. In PAS, fewer than ten first-trimester and fewer than ten second-trimester cases are published.

CASE SUMMARY

History: A 34-year-old G5P3013 with Type II Diabetes, chronic hypertension, and elevated BMI; Obstetric history notable for one induced abortion, two term low transverse cesareans and one late preterm classical cesarean for previa with focal accreta, managed conservatively at an outside facility with uterine artery ligation and complicated by hemorrhage, transfusion, and SICU stay.

13w6d: Six years later, RLQ pain. WBC 14, lactate 2.6, Hgb 11. TVUS: live IUP, fundal placenta, trace free fluid. MRI: thickened appendix, 3 cm omental thickening, and **myometrial thinning at the placental site**. No obstetric etiology identified; discharged at 24 hours.

14w4d: Worse, spreading pain. BP 100/68, persistent lactic acidosis, Hgb 10; MRI read as omental infarct versus torsion. **Within twelve hours:** BP 75/49, HR 144, Hgb 6.9, **consistent with hemorrhagic shock**, with MRI re-review raising concern for dehiscence.

Surgery and pathology: Laparotomy found dense adhesions, 4 L hemoperitoneum, and **fundal rupture at the prior scar and placental site**; the fetus had self-extracted. Supracervical hysterectomy with bilateral salpingectomy by a team of complex gynecologic surgery, general surgery, and OB hospitalists; 7U PRBC, 3U FFP, 1U platelets; discharged POD4. Pathology: focal percreta with omental extension and foci of increta.

DISCUSSION

Recurrence: A conservatively managed focal accreta recurred six years later as percreta at the same scar.

Early imaging under-performs: Ultrasound is 41% sensitive for PAS in the first trimester and 60% in the second. Here the abnormal placental–myometrial interface was seen only on MRI, and not read as obstetric.

A full week of prodrome: Pain, lactic acidosis, leukocytosis, and omental thickening preceded collapse by seven days, progressive scar dehiscence, not an acute event. The omental findings were likely percreta extension, not appendicitis or torsion.

Importance of multi-disciplinary collaboration: With prior uterine scars and conservatively managed PAS, unexplained abdominal pain with rising lactate warrants suspicion for dehiscence at any gestational age. Beyond the checklist, this outcome depended on collaborative care: MFM, radiology, complex gynecologic surgery, general surgery, and OB hospitalists converging on one plan turned a near-fatal rupture into a survivable one.

CLINICAL TIMELINE

Prior conservatively managed accreta → one-week prodrome → rupture, hysterectomy, pathology

HISTORY · 6 YEARS

6 yrs prior

Classical cesarean for previa with focal accreta. Uterine-sparing management, bilateral uterine artery ligation. Postop hemorrhage, transfusion, SICU.

WARNING SIGNS · 7 DAYS

9–13 wk

Current pregnancy. Sonograms unremarkable; no cesarean scar implantation.

13w6d ED #1

+24 hrs

RLQ pain, tachycardia. **WBC 14 · lactate 2.6 · Hgb 11.** MRI: myometrial thinning at placental site, omental thickening 3 cm.

Pain improved. Findings attributed to appendix and omentum; RSV positive. **Discharged.**

14w4d ED #2

+12 hrs

Worse, spreading pain. **BP 100/68 · lactate ↑ · Hgb 10.** MRI: omental infarct vs torsion; thinning persists.

Shoulder and chest pain, dyspnea. **BP 75/49 · HR 144 · Hgb 10 → 6.9.** MRI re-read: concern for dehiscence.

Laparotomy

Hysterectomy & path

Fundal rupture with 4 L hemoperitoneum. Omental adhesions to abdominal wall. Bowel adhesions to posterior uterus. Fetus self-extracted; placenta left in situ. Joint case with Gyn Onc, General Surgery, Complex Benign Gyn, & OB Hospitalists.

Supracervical hysterectomy + BS. 7U PRBC, 3U FFP, 1U PLT; POD4 discharge. **Focal percreta with omental extension,** foci of increta.

IMAGING

Normal first-trimester sonography, then two MRIs initially read as non-obstetric pathology:

Fig. 1 — Sonography, 9 and 13 weeks

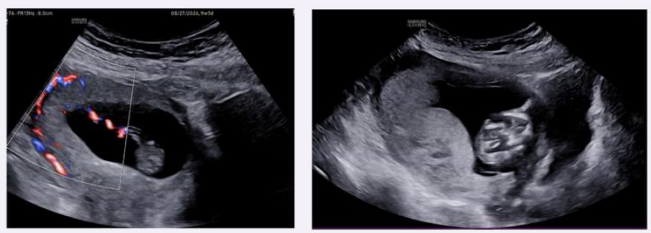


Fig. 1: Sonograms at 9w5d (Left) and 13 weeks (Right) gestation were without abnormal findings or evidence of cesarean scar implantation.

Fig. 2 — MRI, first ED visit (13w6d)

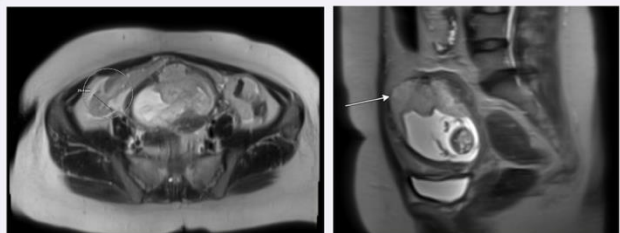


Fig. 2: Mildly thickened appendix, small volume free fluid, and right lower quadrant omental thickening up to 3 cm (L). Prior cesarean scar on uterus. Placenta is seen in the uterine fundus with focal myometrial thinning anteriorly (R).

Fig. 3 — MRI, second ED visit (14w4d)

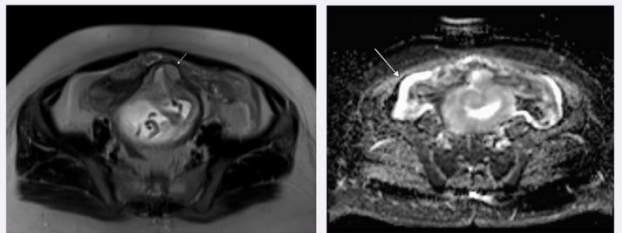


Fig. 3: Omental infarct vs. torsion (R) with persistent myometrial thinning, irregularity, and lobulated contour of the uterine fundus at the attachment site of the placenta (L); re-review later raised concern for dehiscence.

Fig. 4 — Intra operative findings



Fig. 4: Exploratory laparotomy with midline vertical incision revealed uterine fundal rupture. Amniotic sac and products of conception protruding from site of rupture with active bleeding.

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