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Placenta percreta, the most severe form of placenta accreta spectrum, is characterized by placental invasion of the uterine wall and may involve adjacent organs.

This case underscores the necessity for comprehensive preparation and institutional capabilities to optimize placenta percreta outcomes.

# Placenta Percreta and PEA





Anesthesia options include combined spinal epidural (CSE) and general anesthesia (GA) with endotracheal intubation.

#### **Patient Information**

- 37-year-old G3P2002 presented with ultrasound findings at 24 weeks suggestive of placenta percreta
- Past medical history of two Cesarean deliveries, class 2 obesity, and preeclampsia
- Imaging revealed multiple lacunae and bladder walluterine interface
- Baseline TTE and labs were within normal limits, with hemoglobin 11 g/dl and platelet count  $145,000/\mu$ L



Transabdominal ultrasound showing evidence of placenta previa and multiple lacunae

# **Case Presentation**

- followed by elective conversion to GA after delivery
- Blood products, rapid infuser present in room

### 100 mg epinephrine

- incision and delivery
- blood loss
- after <10 seconds of chest compressions
- indicated severe hypovolemia
- units of platelets, and 10 units cryoprecipitate

later with no deficits

### Preoperative

Patient was scheduled for a Cesarean delivery and hysterectomy, with plan for CSE Large bore IV, arterial line, 9 Fr double-lumen central line

### Intraoperative

CSE performed at L2-L3 with 1.6 mL hyperbaric 0.75% bupivacaine, 15 mcg fentanyl, and

Urology performed a cystoscopy and placement of stents OB team created a vertical incision to T6 and approximately 90 minutes later, uterine

Within two minutes, patient experienced PEA arrest due to apparent large volume acute

Patient was promptly intubated, epinephrine was administered, and ROSC was achieved

Intraoperative TEE confirmed normal ventricular function, but complete collapsibility

Hemorrhage persisted, necessitating massive transfusion of 17 units pRBC, 17 units FFP, four

#### Postoperative

Patient was extubated the following day in the SICU and was discharged to home 1 week



- In this case, preoperative access, rapid infuser, and TEE guidance enabled prompt resuscitation
- Anesthetic choice should balance patient-specific risks and institutional capabilities, with comprehensive preparation key to optimal outcomes
- Discussion with IR or vascular surgery regarding potential balloon-tipped arterial catheters, which may have helped mitigate intraoperative bleeding

## Discussion

#### Neuraxial anesthesia

#### Superior analgesia

Avoidance of airway manipulation

Minimal effect on uterine tone

Insufficient sedation in the event of cardiovascular collapse

#### General Anesthesia

Superior operative conditions

Controlled ventilation

Secured airway

Can lead to more blood loss and fetal exposure to anesthetics

#### Elective CSE conversion to GA

Reduced fetal exposure to anesthetic

Airway secured for resuscitation

Timing of induction and intubation may be suboptimal

Risk of hemodynamic instability in the setting of neuraxial sympathectomy

References:

- 1. Allen et al. Gyn. 2018.
- 2. Warrick et al. Anesth. 2022 Jul;135(1).



