Case Report: Unknown Placenta Accreta Encountered During Elective Cesarean Section

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Background:

Placenta accreta spectrum (PAS) occurs when the placenta invades the uterine wall at varying depths

— Increasing in incidence (3 per 1000 deliveries) likely due to increasing rate of Cesarean deliveries

— Risk factors: prior placenta previa, multiparity, advanced maternal age, and prior uterine surgery

Primary complications are related to postpartum hemorrhage and definitive management is hysterectomy at time of delivery to prevent further blood loss

Anesthetic Considerations:

Preparing for possible mass transfusion and general anesthesia

Establishing adequate IV access

Access to blood products, pressors, difficult airway tools and other equipment for conversion to general anesthesia

Open communication between care teams and patient or patient representative

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Our patient: 22F G3P2 presenting for elective C-section

Medical History:
- Sickle cell trait
- Anemia (Hb ~11)

Obstetric / Surgical History:
- Prior C-section x2, operative notes indicating mild serosal adhesions, current pregnancy uncomplicated with good prenatal follow up

Anesthetic Plan:
- Spinal with bupivacaine 0.75% (13 mg), morphine (0.15 mg) and fentanyl (20 mcg)

Intraoperative Course:

— Spinal completed without difficulty, resulting in T4 sensory level bilaterally

– On visualization of uterus, area of hypervascularity noted on external uterine wall, concerning for **placenta percreta**

– Further IV access established, and blood bank contacted to obtain products

– On delivery of fetus, placenta percreta was confirmed and decision was made with patient and family member present to proceed with **abdominal hysterectomy**

– 45-minute **delay in receiving blood products** due to antibodies documented on prior type and screen (current T&S on day of surgery was negative)

– Due to increasing pressor requirements 50g albumin, 1g tranexamic acid, and 2 L crystalloid given in the interim, 2u pRBCs transfused after arrival

– 30 minutes after delivery of fetus and 90 minutes after initial spinal procedure patient endorsed sharp pain near surgical field

– Converted to **emergency general anesthesia**, patient intubated via rapid sequence intubation without complication

– Patient had stable pressor requirement throughout remainder of procedure

– Final EBL ~3L

– Patient extubated without difficulty and was hemodynamically stable at completion of case

– Postoperative course was uncomplicated

Key Learning Points & Other Considerations

Should patients with isolated risk factors for placenta accreta spectrum and postpartum hemorrhage be more frequently considered for combined spinal-epidural vs single shot spinal?

– Patient risk factors in this case included history of prior C-sections and multiparity, however current pregnancy had been uncomplicated

– Emphasizes importance of thorough chart review of patient's medical, surgical and obstetric histories when choosing anesthetic plan for C-section

Consideration of planned conversion to general anesthesia after delivery of fetus to avoid inadequate anesthesia later in case:

– Pre-emptive discussion with patient regarding conversion to general anesthesia after delivery of fetus and prior to hysterectomy, since procedure was significantly prolonged

– Highlights importance of preparing labor and delivery ORs with necessary emergency equipment, medications and difficult airway tools to convert to general anesthesia

Importance of familiarity with hospital-specific screening and transfusion protocols:

– MetroHealth protocol: Any prior positive antibody screen requires full cross-match; historical antibodies must be honored even if current screen is negative

– Consideration of preemptively ordering blood products for patients undergoing C-section with known risk factors for postpartum hemorrhage and prior positive antibodies on T&S to avoid delays in transfusion

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