TWO SCARS AND A LITTLE LADY: A MULTIDISCIPLINARY APPROACH TO MANAGING A CESAREAN SCAR PREGNANCY

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Background

Cesarean scar pregnancy (CSP) is a rare form of ectopic pregnancy that is implanted on or in a scar from a prior cesarean birth. CSP can lead to severe fetal and maternal morbidity (uterine rupture, maternal hemorrhage, infection, ICU admission) and mortality.

There are two types of CSP:
- Type 1 ("on-the-scar") or endogenic
- Type 2 ("in-the-niche") or exogenic

CSP can precede and share common histology with placenta accreta spectrum (PAS) and account for 6% of abnormally implanted pregnancies among patients with prior cesarean section (CS).

Case Report

41-year-old G17P0-3-13-3 who presented at 22w0d GA for expectant management with full fetal interventions.

- Past Medical History: CSx2, HTN, obesity (BMI >50), history of cerclage, recurrent pregnancy loss, migraines, asthma, lupus and antiphospholipid antibody syndrome.
- Imaging: MRI was significant for concern for PAS involving lower uterine segment and uterine window. Patient was extensively counseled and expressed a strong desire to continue pregnancy.

Operative Course

Patient remained hospitalized for maternal and fetal monitoring. Her care was coordinated with a large multidisciplinary team including gynecology-oncology, OB anesthesia, and NICU. At 28w2d GA, the patient came to the conclusion that the maternal risk of continuing the pregnancy outweighed the neonatal benefit of continued pregnancy. Delivery was scheduled for 29w5d.

Preoperatively
- Arterial line
- 2 large bore peripheral IVs
- CSE

Surgical Procedures Performed
- Cesarean hysterectomy
- Bilateral salpingectomy
- Cystoscopy with bilateral ureteral stents

I/O:
- Estimated blood loss was 5.5 L
- Received 5.4 L of crystalloid
- Received 11 units of blood products

Post-Operative
- Course was uncomplicated
- Wound vac system was placed
- Transitioned off anti-hypertensives and insulin
- Brief pre-renal AKI, resolved with fluid resuscitation
- Discharged on POD #4 with follow up in 1 week

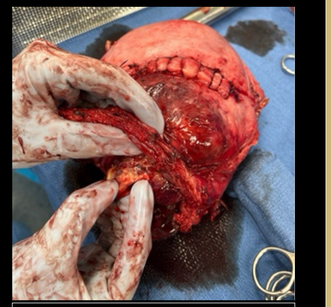

Image 1: Cesarean scar present in uterus after hysterectomy

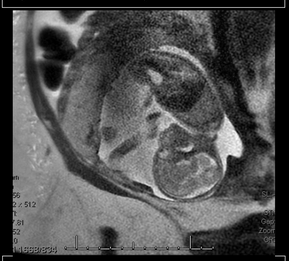

Image 2: MRI showing ectopic pregnancy located at CS scar site and PAS placenta

Discussion

- Mechanism for implantation remains unclear
  - Postulated blastocyst implantation within a microscopic dehiscence tract in the previous CD scar
- Incidence is unknown (under diagnosed and underreported)
- Diagnosed with a TVUS with color Doppler evaluation during the 1st or 2nd trimester
- Definitively diagnosed during surgery

Management
- Surgical or medical termination
- Expectant management
- Adjuvant therapies (uterine artery embolization or systemic methotrexate)
- Delivery at a level III or level IV facility with appropriate resources

Take Away Points

- CSP can lead to severe fetal and maternal morbidity and mortality if inadequately managed
- Shared decision making and counseling is imperative between the patient and medical teams for the safest outcome
- Multidisciplinary team can include: gynecology-oncology, OB anesthesia, urology, and NICU teams
- All teams should be prepared for any emergency while patient is hospitalized

References:

1. Timor-Tritsch, IE. Cesarean scar pregnancy. In: UpToDate, Simpson, L (Ed), Wolters Kluwer. (Accessed on January 19, 2025).
2. Society for Maternal-Fetal Medicine Consult Series #63: Cesarean scar ectopic pregnancy Miller, Russell et al. American Journal of Obstetrics & Gynecology, Volume 227, Issue 3, B9 - B20