A Case of Ruptured Cornual Pregnancy with Delivery of a Viable Pre-Term Infant

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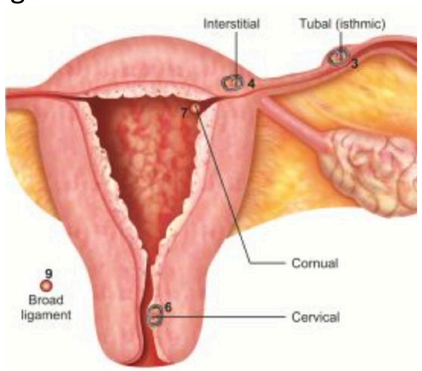
INTRODUCTION

- Cornual ectopic pregnancy implants in the upper, lateral portion of the uterus, near attachment of the fallopian tube[1]
- Important to distinguish from interstitial pregnancy, which implants in the portion of the fallopian tube that penetrates the muscular layer of the uterus[1]
- Rare forms of ectopic pregnancy, with high fetal and maternal mortality rate due to ability to evade detection and high risk of rupture and subsequent hemorrhage[1]



CASE DESCRIPTION

- 42 y/o G2P1001 at 25+3 weeks gestation
- Pregnancy complicated by advanced maternal age, late presentation for prenatal care in her second trimester, and THC use
- Presented to outside hospital with complaints of sudden onset abdominal pain and syncopal episode at home
- Transferred to MHC for concerns for sepsis, with hypotension, tachycardia, lactic acidosis, and peritoneal free fluid

CASE DESCRIPTION

- Evaluated by both OBGYN and General Surgery
- Bedside US showed viable infant in breech position with anhydramnios; free fluid was again demonstrated in the abdomen
- Fetal heart tones were persistently Category 2, with periods of minimal variability and variable and late decelerations
- Taken to OR by both OBGYN and Trauma Surgery, with NICU present
- In OR, 2 liters hemoperitoneum immediately evacuated, abdomen packed, visualization of uterus reveled right cornual rupture with active bleeding
- Infant delivered breech via classical cesarean hysterotomy and handed off to NICU
- Cornual rupture noted to extend to isthmus of right fallopian tube, which was removed; hysterotomy and cornual rupture repaired with good hemostatic result
- Trauma surgery then explored the abdomen, no further sources of bleeding were identified
- Post-operative course was complicated by post-op ileus, which resolved in 24hours, and gestational hypertension; discharged home on post-op day four in good condition
- The infant had Apgars of 1, 2, and 3 at 1, 5 and 10 minutes; she was immediately resuscitated by the NICU team; NICU course was complicated by Grade 2 intraventricular hemorrhage that was shown to be resolving, GERD, Chronic Lung Disease with mild pulmonary hypertension, retinopathy of prematurity status post bilateral laser surgery; she was transferred to Children's Medical Center on day of life 130 due to worsening respiratory status and concern for ventilator-associated pneumonia

DISCUSSION

- Detection
  - Increased diagnostic accuracy via US using 3 diagnostic criteria: 1) an empty uterus, 2) a gestational sac seen separately and <1cm from the most lateral edge of the uterine cavity, and 3) a thin myometrial layer surrounding the sac[2]
  - Criteria are most accurate during first trimester, so if diagnosis is not made during that time (our patient) it becomes more difficult→ possible role of MRI to diagnose later in pregnancy, although some research showing it is not good for the fetus[3]
  - Location allows for large amount of distention prior to rupture; large hemorrhage with rupture due to highly vascularized uterus
- Management
  - Early and prior to rupture: systemic methotrexate or uterine artery embolization[4,5]
  - Late or ruptured: surgery via cornual excision or cornuostomy; after surgery, may suture uterine wall to strengthen myometrium and prevent rupture in future pregnancy[6,7]
  - Future pregnancies should be delivered via repeat cesarean at 36-37 weeks[8]

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