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A 38 yo non English speaking female presents to the ED with mild throbbing abdominal pain onset of 4 hours. On initial assessment she seems mildly obese with a respiratory rate of 25. She states that she was sleeping when she noted the immediate sensation to go to the bathroom. When she attempted to go she noted fullness to her perineal area as well as pink-tinged urine in the toilet. She endorses mild low back pain and mild constant discomfort to her perineal area. She denies any fever, nausea, vomiting, HA, blurred vision, SOB, dysuria, or vaginal discharge. Upon further questioning you learn that pt's LMP was 7 months ago with regular menstrual cycles prior to; she's G3P0111 with no prenatal care. Her previous pregnancies were complicated with spontaneous abortion in the first trimester and a preterm child who is now 3 yo. PMHx: Pre-DM, NKDA, no surgical history, Family history positive for HTN and DM, No T/E/D.

Initial Vitals: BP 139/90, HR: 98, RR 25, Temp 36.7 C, 100%.

Physical exam reveals Fundal height an inch above the umbilicus and mild lower abdominal tenderness. On bimanual exam a pulsatile bulge appears at the labial folds.

Umbilical Prolapse

Epidemiology: occurs in 0.4% of pregnancies

Results from propulsion of umbilical cord prior to fetus. The problem lies in the compression of the cord resulting in diminished blood flow to the fetus, making this a life-threatening emergency.

Risk Factors noted: non-vertex presentation, multi-parity births, preterm birth, incompetent cervix, placenta previa

Management: Upon initial encounter the examiner should immediately attempt to **elevate the presenting fetal part** to reduce compression on the cord and hold it there. **DO NOT ATTEMPT TO REDUCE THE PROLAPSED CORD!** The patient is immediately transferred to the **OR for immediate C-Section.**

Focused Summary – 3rd Trimester Bleeding

- a) Incidence: occurs in < 5% of pregnancies
- b) Management: CBC, coags, Type & Screen (Rh), UA, fetal heart tones
 - i) Determine if this is fetal blood or maternal blood. This is normally not done in a busy ED setting. However in the rural setting, it becomes more applicable to determine the source of bleeding with the limitation of immediate OB/Gyn service.
 - (1) Apt Test: put maternal blood in test tube with KOH => If brown mom's; if pink fetus'
 - (2) Kleihauer-Betke Test: take mom's blood if >1% Fetal Hgb = Fetal blood
 - (3) Wright Stain: look for nucleated RBCs in vaginal blood = Fetal blood
 - ii) **Do not do a pelvic exam on a 3rd trimester bleeding pt.**
 - iii) Trans-abdominal ultrasound
- c) Diff Dx
 - 1) **Placenta Previa**

- Painless vaginal bleeding with normal fetal heart tones
 - Placenta overlies Cervical Os
 - Risk Factors: hx of C/S, previous Placenta Previa
 - Types: Marginal, Partial, Complete
 - Management: observe and prep for C/S
 - Complications: can develop into placenta accreta or percreta
- 2) Placenta Abruptio**
- Painful vaginal bleeding, back pain, cramping/abdo pain with abnormal fetal heart tones
 - Premature separation of placenta from uterine wall
 - Risk factors: Trauma, Pre-eclampsia/hx of HTN, Cocaine use,
 - Management: note U/S only detects approximately 50% of cases. So clinical suspicion must be high. Immediate C/S if unstable. Expectant management if fetus and mom are stable.
 - Complications: DIC
- 3) Uterine Rupture**
- Tearing of uterine wall
 - Painful contractions with immediate cessation
 - Risk Factors: C/S (vertical scars carry a 5% risk)
 - Management: ABCs as above and immediate C/S followed by hysterectomy
- 4) Vasa Previa**
- Painless vaginal bleeding with abnormal fetal heart tones
 - Management : Immediate C/S

Sources / Further Reading

- 1) Bako, B., Chama, C.; Emergency Obstetrics Care in a Nigerian Tertiary Hospital: 20 year Review of Umbilical Cord Prolapse. Niger J Clin Pract. 2009 Sept 12 (3): 232-6.
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- 4) VanRooyen MJ, Scott JA. Chapter 105. Emergency Delivery. In: Tintinalli JE, Stapczynski J, Ma O, Cline DM, Cydulka RK, Meckler GD, T. eds. Tintinalli's Emergency Medicine: A Comprehensive Study Guide, 7e. New York, NY: McGraw-Hill; 2011.
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