Foundations Frameworks

Approach to Vaginal Bleeding

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The differential diagnosis and subsequent management for vaginal bleeding can be broken down by asking a few important questions: is the patient pregnant, is the patient stable or unstable, and if pregnancy test positive, is the patient in early pregnancy, late pregnancy, or postpartum.

Pregnant

- **1st Trimester- Unstable Vaginal Bleeding**
  - If a patient is hemodynamically unstable with a positive pregnancy test: this patient has a *ruptured ectopic pregnancy* until proven otherwise
  - Assess for peritonitis, perform a FAST exam to evaluate for free fluid in the abdomen/pelvis
  - Obtain large bore IV access, begin fluid resuscitation with crystalloid and blood products and emergently consult the OB service
  - This patient needs to be taken to the OR to gain control of intraabdominal hemorrhage
    - Another potential cause of this presentation (+ pregnancy, free fluid in young woman) would be with a uterine rupture following elective D&C procedure
- **1st Trimester- Stable Vaginal Bleeding**
  - Rule out ectopic pregnancy
    - Confirm intrauterine pregnancy (IUP) via transabdominal or transvaginal US (must visualize yolk sac or fetal heart tones (FHT) to confirm IUP)
    - If hCG > 1500-3000 (discriminatory zone), should be able to visualize intrauterine pregnancy on transvaginal US (if unable to visualize IUP -> ectopic pregnancy until proven otherwise)
    - Ectopic pregnancy: roughly 2% of all pregnancies, previous tubal pregnancies and tubal surgeries significantly increase risk
    - Beware of heterotopic pregnancies (ectopic and IUP present simultaneously) in women receiving fertility treatment
    - If unable to confirm intrauterine pregnancy, but patient is without intra-abdominal free fluid, has stable vital signs, and minimal abdominal tenderness, can be discharged with strict return precautions and close OB f/u to repeat hCG in 2 days
  - Once IUP is confirmed, determine which type of miscarriage is taking place:
    - Threatened: normal FHT (120-160), closed cervix -> 90% will go on to have normal pregnancy
    - Complete: no intrauterine pregnancy with open cervix/passage of products of conception
    - Incomplete: active passage of products of conception
    - Inevitable: normal FHT with open cervix
    - Missed: intrauterine pregnancy without FHT and closed cervix -> consult OB for D/C
    - Septic: infected retained products of conception -> give antibiotics, resuscitate, consult OB

    - Consider giving Rhogam in all Rh(-) pregnant patients with vaginal bleeding
- **Late Pregnancy**
    - Placenta Previa: placenta extends over cervical os, painless vaginal bleeding, don't perform sterile glove exam as this may worsen bleeding, US to confirm diagnosis
    - Placental Abruption: spontaneous separation of placenta from uterus, typically presents as painful vaginal bleeding. Can be spontaneous or traumatic. Evaluate for fetal distress, 67-75% rate of fetal mortality.
- **Post-Partum**
    - Uterine Atony: accounts for 80% of post-partum hemorrhage
        - Perform uterine massage, remove POC from cervical os
        - Oxytocin: 80 units in 500 mL run wide open
        - Misoprostol (Cytotec): 1 gram rectal, 600 mcg SL
    - Retained Placenta
        - Manual removal, D&C with OB
    - Cervical, vaginal lacerations
    - Underlying coagulopathy

Not Pregnant

- **Unstable Vaginal Bleeding**
- Fibroids, trauma, vaginal/cervical laceration, neoplasms, infectious/PID, coagulopathies, foreign bodies
- Large bore IV access, O(-) blood transfusion, temporize bleeding with vaginal packing, consider giving tranexamic acid, emergent Gyn consultation

Stable, Non-Pregnant Vaginal Bleeding

- Young: dysfunctional uttering bleeding, STI, vaginal/cervical trauma, foreign body
- Old: Fibroids, neoplasm
- First line: Ibuprofen
- Second line: OCPs or Medroxyprogesterone

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