1 ***Molar Pregnancy***
Gestational Trophoblastic Disease
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2 **Gestational Trophoblastic Disease**
- Trophoblastic tissue develops abnormally after gestation is established
  - Increased HCG X10 at same age for normal gestation
  - Remains elevated after 60 days
  - Risk factor
    - Younger than 20
    - Older than 40

3 **Hydatidiform Mole:**
- Signs and Symptoms:
  - Vaginal bleeding maybe present with pain
  - Increased HCG-very high levels for GA
  - LGA
    - Rapid rate of growth of the uterus
  - Hyperemesis gravidarum
  - Signs of pre-eclampsia
    - HTN, proteinuria, edema

4 **Gestational Trophoblastic Disease**
- Benign form:
  - Positive hydatidiform mole
- Invasive form:
  - Invasive mole
- Increased malignant form:
  - Choriocarcinoma

5 **Hydatidiform Mole:**
- Theca Lutein Cysts
  - Vessicles can pass vaginally (unusual)
- Sonographic Characteristics of Complete
  - First Trimester
    - Mistake AB
    - Incomplete AB
    - Blighted Ovum
  - Second Trimester
    - Vessicles larger and have classic appearances
    - Theca Lutein cysts

6 **Gestational Trophoblastic Disease**
- Associated Ovarian Changes:
  - Theca Lutein cysts 20-35% of molar pregnancy
  - Theca Lutein cysts form in response to the increased HCG
    - Usually large and multi loculated
    - Bilateral

- Resolve after mole removed (2-4months)

7. **Partial Mole**
   - Chorionic Villi edematous not prolific
     - Fetal tissue present although grossly abnormal
     - Some will have a normal placenta
       - Usually has numerous cystic areas
     - No change to malignant form

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8. **Complete Hydatidiform Mole:**
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     - Benign form
     - Trophoblastic proliferation into mass/tumor made up of many cells.
     - Degeneration of chorionic villi in the absence of normal circulation
     - Villi become hydropic
       - vessicles-grapelike clusters
     - Usually benign can form into a malignancy called choriocarcinoma
     - Fetal parts not seen

9. **Complete Mole**

   - No fetal tissue present in the molar mass
   - Symptoms prior to 20 weeks:
     - Pre-eclampsia
     - Vaginal bleeding
     - Increased HCG
   - Sonographically:
     - Soft tissue, echogenic mass fills uterine cavity
     - Bilateral theca lutein cysts

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10. **Coexisting Fetus and Mole**
    - Def: Dizygotic twin gestation
      - Mole (complete or partial)
      - Fetus
      - One egg fetus, one egg mole
      - Can become invasive
      - Placenta is normal and separate from fetal tissue

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11. **Locally Invasive Mole**
    - Chorionic Villi penetrate myometrium
      - Can have invasion of bladder wall with hemorrhage of local vessels
      - extensive proliferation
        - villi pattern preserved
      - Clinically suspected with increased levels of BhCG after evacuation of hydatidiform mole

12. **Metastatic Choriocarcinoma**

- Most severe malignant form
- Mets to:
  - Liver, brain, lungs, bone, GI
  - High degree of trophoblastic proliferation which masks the villous pattern
- A degenerating leiomyoma may mimic:
    - Hydatidiform mole

13 **Treatment**

- Uterine curettage
- Serial measurements of serum hCG levels
  - Typically fall by the 10-12th weeks

14 **Conclusion**

- Gestational trophoblastic disease
  - Partial or complete
  - Coexisting fetus and mole
  - Locally invasive
  - Choriocarcinoma
- High beta hCG
- Theca lutein cysts
- Grape like presentation in uterus
- D & C is often treatment plan
  - Long term hormone follow up.

15 **Molar Pregnancy**

- Clinical signs
  - Large for gestational age
  - Hyperemesis
  - Elevated β hCG
    - Increase at an abnormal rate
  - Uterine edema
  - Vaginal bleeding
  - Hypertension
  - Passage of tissue

16 **Molar Pregnancy**

- Sonographic signs
  - Echogenic material filling uterus
  - Swollen chorionic villi appear "grape-like"
  - Theca lutein cysts on ovaries
    - Due to the high βhCG
    - Multilocular
    - May take 2-4 months to resolve

17 **Molar Pregnancy**