Arabian Gulf University – Kingdom of Bahrain
Year 5 – Gynecology and Obstetrics – 4th Week
Salmanya Medical Complex – Dr. Saeeda – Trophoblastic Disease

- **What is Gestational Trophoblastic Neoplasia (GTN)?**
  - Abnormal proliferation of placenta tissue involving both the cytotrophoblast and/or syncytiotrophoblast.
- **Risk factors:**
  - Being from Philippines or Taiwan.
  - Maternal age extremes (< 20 years old, > 35 years old).
  - Folate deficiency.
- **What are the clinical findings?**
  - Bleeding before 16 weeks of gestation with passage of vesicles from the vagina.
  - Fundus larges than dates.
  - Hyperemesis gravidarum.
  - Pre-eclampsia.
  - Hyperthyroidism.
- **Classification of GTN:**
  - **Benign GTN**: it is the classic hydatidiform mole which is common in Far East (especially Philippines and Taiwan):

Complete Mole	Incomplete Mole
Fertilization of an empty egg with a single X sperm resulting in paternally derived normal 46,XX karyotype	Fertilization of a normal egg with two sperms resulting in triploid 69,XXY karyotype
No fetus is present and uterus is filled with grape-like vesicles (snowstorm appearance with ultrasound)	Parts of the fetus are present
Progression to malignancy is 20%	Progression to malignancy is 10%
Management: no chemotherapy is needed; weekly β-hCG titers for 3 weeks then monthly for 12 months (with oral contraceptive pill)	

  - **Malignant GTN:**

Non-metastatic	Good prognosis	Poor prognosis
Uterus only	Pelvis or lungs	Brain or liver
100% cure	> 95% cure	65% cure
Single agent chemotherapy (methotrexate)		Multiple agent chemotherapy (methotrexate, actinomycin-D and cytoxan)
Weekly β-hCG for 3 weeks then monthly for 12 months (with oral contraceptive pill)		Weekly β-hCG for 3 weeks; then monthly for 2 years; then every 3 months for another 3 years (total of 5 years – with oral contraceptive pill)

- **Initial management includes:**
  - Baseline quantitative β-hCG titer.
  - Chest x-ray to rule out lung metastasis.
  - Suction D&C to evacuate the uterine contents.
    Then you will follow the management plan depending on the classification of GTN (as mentioned above).