52-year-old female presents with pelvic fullness, amenorrhea, and is found to have positive beta-HCG

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Images from 1\textsuperscript{st} trimester U/S
Patient returns during 2\textsuperscript{nd} trimester with heavy vaginal bleeding, rising HCG
Complete hydatiform mole
The endometrium is thickened

A small volume of cavitary fluid is present

No obvious gestational sac is observed

Vascularity is relatively normal
Prominent uterus with innumerous anechoic spaces of varying sizes

Endometrium remains thickened

Echogenic intrauterine mass
Complete hydatiform mole

- Trophoblastic proliferation (both cytotrophoblast and syncytiotrophoblast) and vesicular swelling of placental villi associated with absent fetus
- Highest risk pts are very young and those nearing end of reproductive age
- About 3-10x higher incidence in Asia
- Commonly presents late in 1st trimester with vaginal bleeding, rapid uterine enlargement with absent fetal heart tones despite rising HCG
Complete hydatiform mole

- Diploid karyotype of paternal origin results in 46XX karyotype in 90% of cases
- Uncomplicated cases $\rightarrow$ excellent prognosis, tx is suction curettage
- However, may evolve into invasive mole (12-15%) or choriocarcinoma (5-7%)
  - Must perform careful metastatic workup
- Interestingly, can be coexistent with a fetus $\rightarrow$ dizygotic twin CHM + fetus
Imaging

- 1st trimester U/S may be normal
- 2nd trimester U/S shows “Swiss cheese” or “cluster of grapes” endometrium
  - Hydropic villi appearing as 1-30mm cystic spaces within echogenic endometrial mass
- May present with b/l theca lutein cysts (50%)
- Hemorrhage within mass is also not uncommon
- CT is nonspecific, but may show large heterogeneously enhancing mass with internal reticular appearance due to enhancing septa
- MRI primarily used with Gadolinium to examine for myometrial invasion (best modality)
References
