

# Rare Twin Pregnancy with Hydatidiform Mole and Normal Co-Existing Fetus

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## BACKGROUND

- Hydatidiform moles (HM): uncommon gestational trophoblastic disease 1:1,000<sup>1</sup>
- Genetic error during fertilization
- Abnormal fetoplacental development and trophoblastic hyperplasia

Two types:

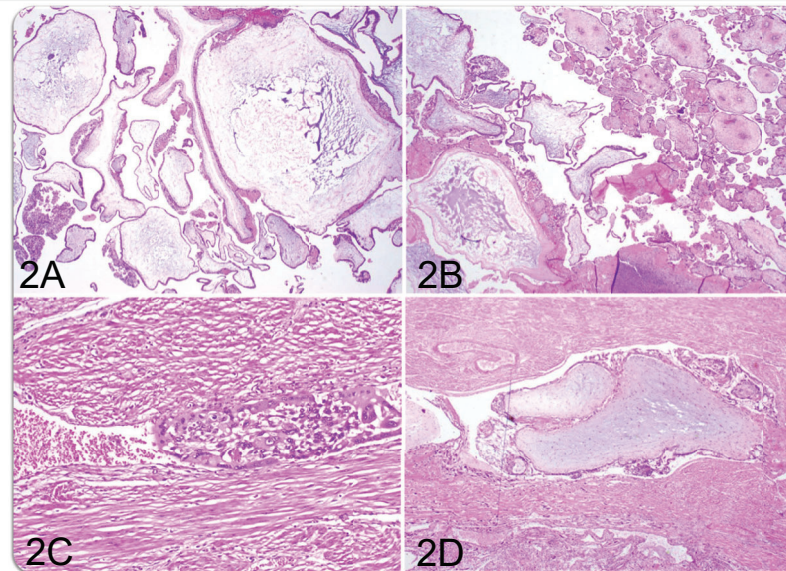
- Partial mole – maternal DNA and excess of paternal DNA (e.g., XXY 69N)
- Complete mole – all paternal DNA (e.g., ØXY 46N)
- Can develop into invasive moles or malignant gestational choriocarcinoma
- Twin hydatidiform moles, rare 1:20,000-100,000<sup>2</sup>

**Figure 1.** Gross image. Hydatidiform mole (hydropic villi) and normal twin.



**Figure 2.** Microscopic images H&E.

- A. Representative section of partial molar tissue cystic villi.
- B. Placenta to mole interface.
- C. Mole invasion into myometrium.
- D. Lymphovascular invasion.



Risks include:

- premature birth, intrauterine death, vaginal bleeding, preeclampsia, hyperthyroidism, theca lutein cysts, uterine rupture, and trophoblastic neoplasms
- HM associated with advanced maternal age, in vitro treatment, previous history of intrauterine death, and more commonly seen in Eastern Asian populations.<sup>3</sup>

## CLINICAL HISTORY

- 43 yo Hispanic female
- G5P3013
- Presented with vaginal bleeding, nausea, and vomiting at 15 weeks pregnant
- Markedly elevated hCG >200,000 mL
- TVUS detected “snowstorm” mass of hydropic chorionic villous tissue occupying 85% of uterus
- Intrauterine fetus (no gross abnormalities) and normal appearing placenta
- Histology confirmed invasive hydatidiform mole confined to uterus staging pT1 (Figure 1)
- Lymphovascular and myometrium invasion (Figure 2) seen on microscopics
- IHC p57kip2 positive confirmed partial molar pregnancy

## DISCUSSION

3 possible mechanisms for twin HM<sup>4</sup>:

- Partial HM with normal coexistent fetus (triploid HM/diploid fetus) – most likely mechanism, no genetic testing done to confirm
- Partial HM with abnormal coexistent fetus (both triploid karyotype 69N) – most common
- Complete HM with normal coexistent fetus (both diploid karyotype)

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