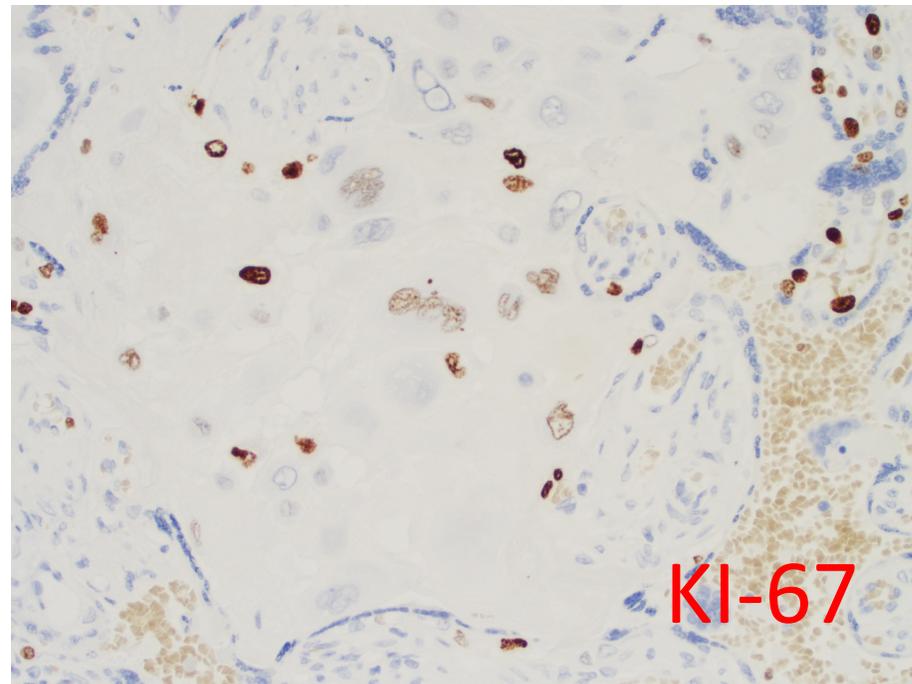
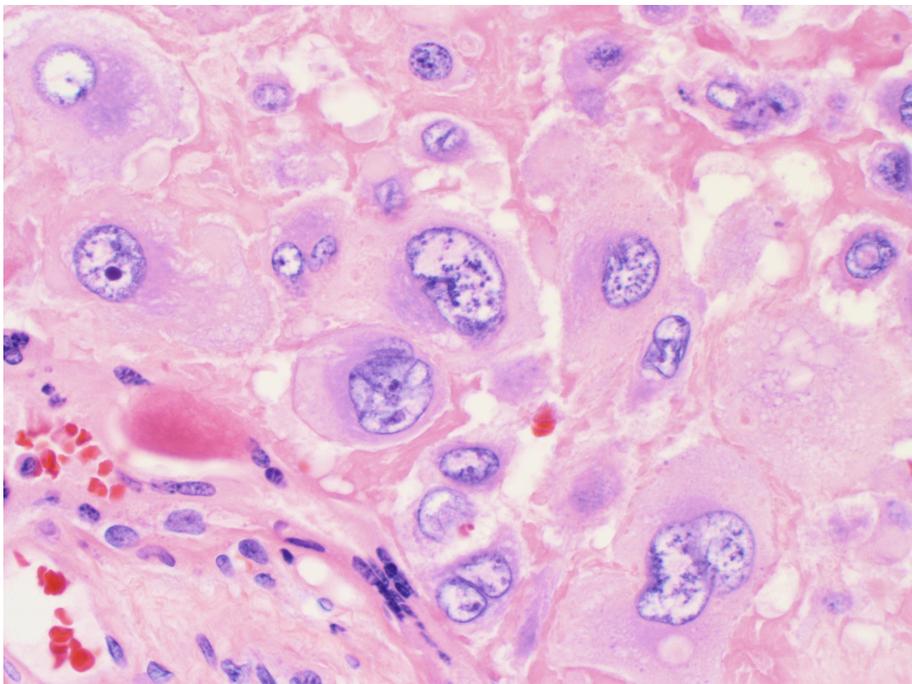
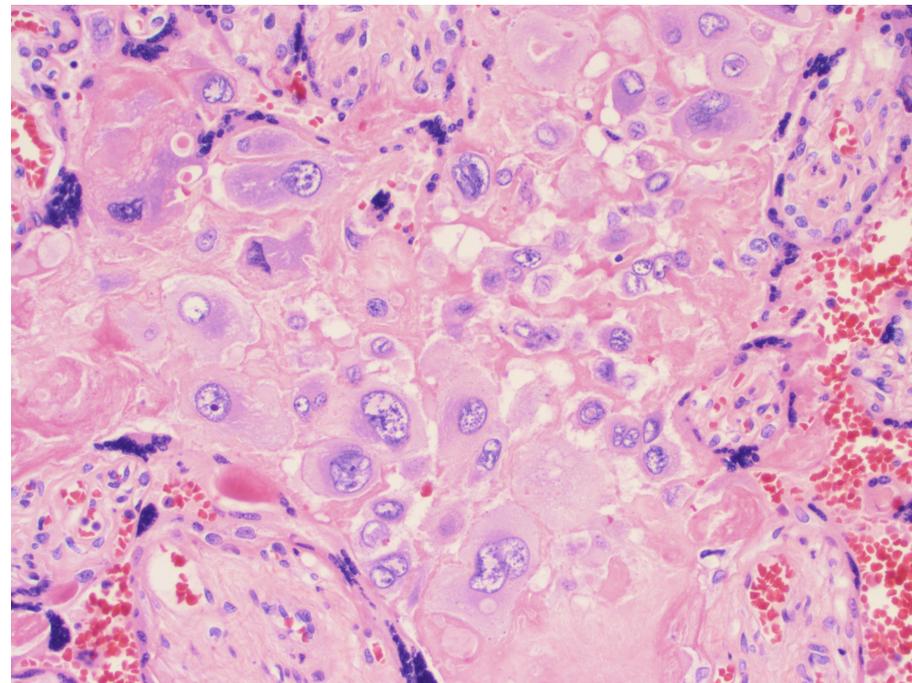
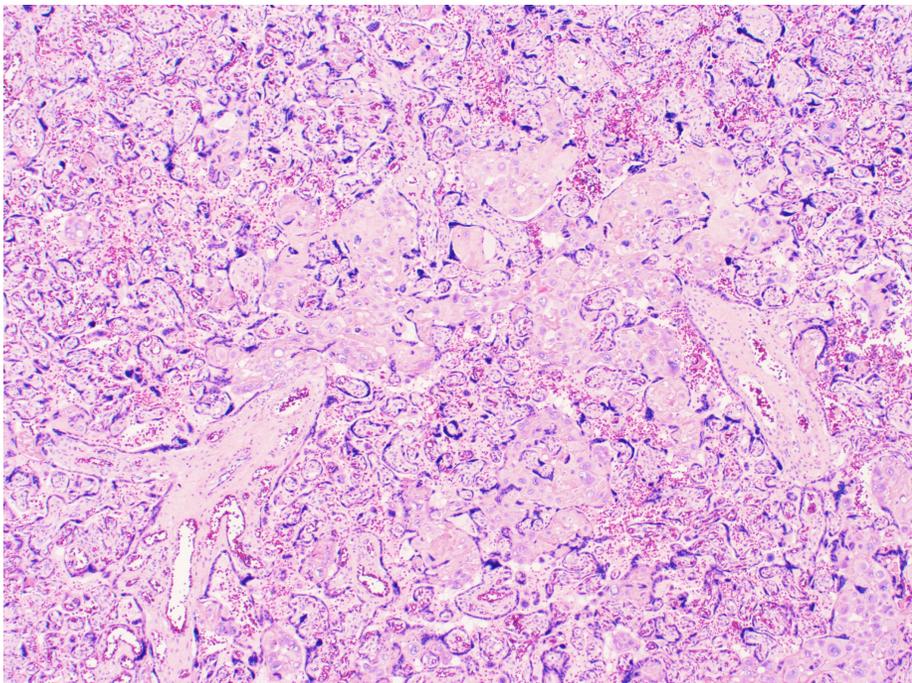


Case Presentation

35-year-old woman G1P0 delivered a healthy infant with Apgar score of 9/9 at 38+5 weeks and an irregular singleton placenta of 780 grams with intact membrane and eccentrically inserted three vessel umbilical cord. Sections of the placenta are grossly unremarkable. A 4 mm intraplacental lesion is found microscopically.

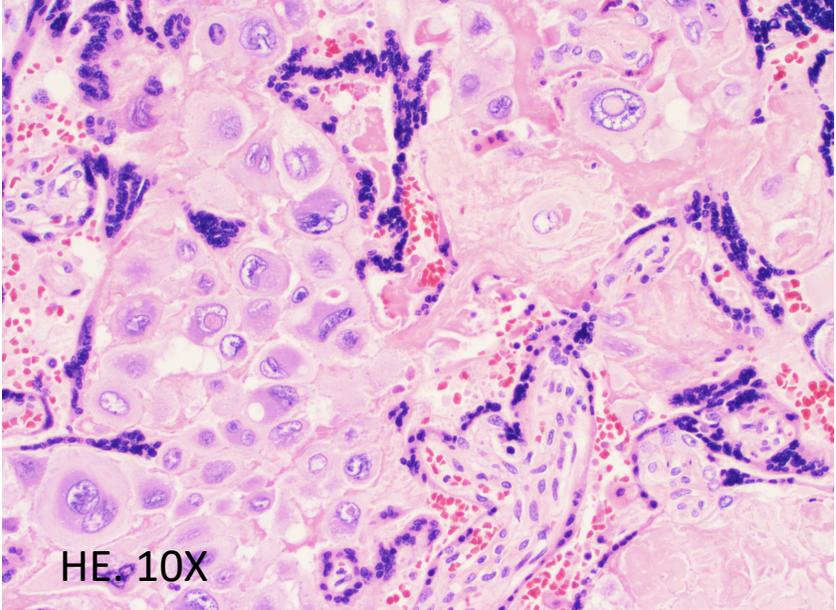
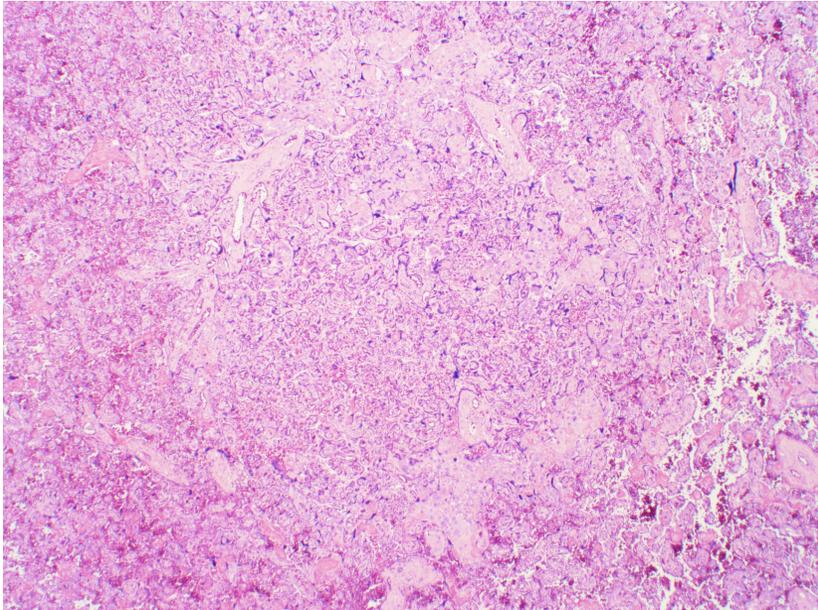


KI-67

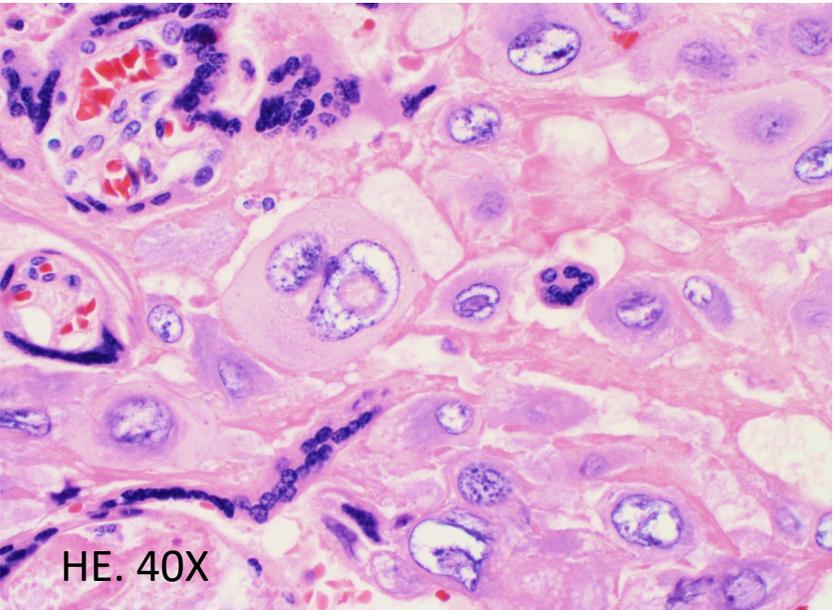
Differential diagnoses

- A. Atypical placental site nodule (APSN)
- B. Epithelioid trophoblastic tumor (ETT)
- C. Intraplacental choriocarcinoma
- D. Bizarre chorionic-type trophoblast

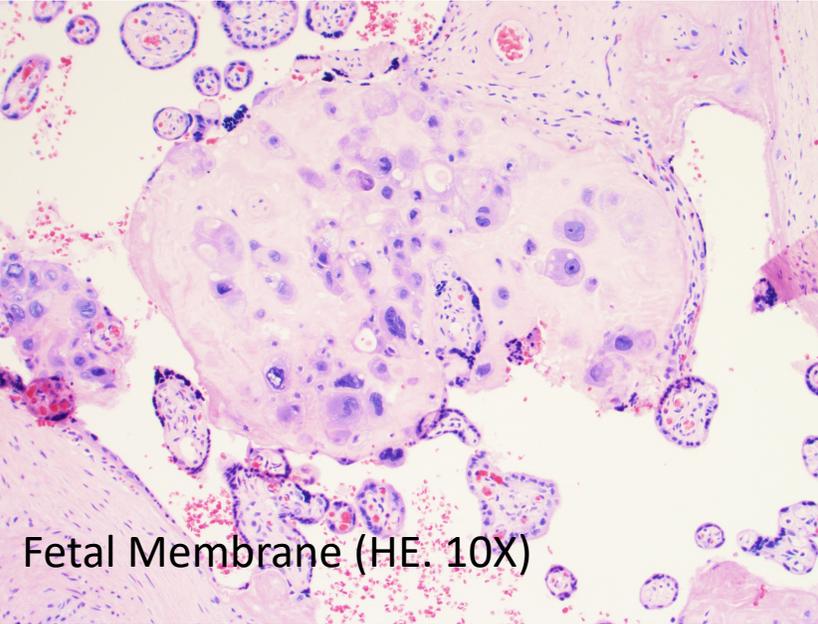
Additional Histological Images



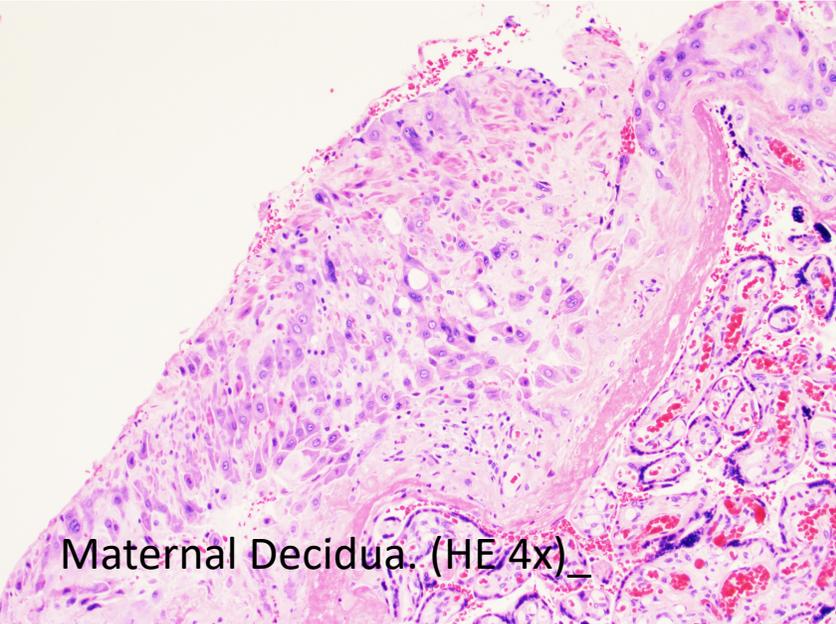
HE. 10X



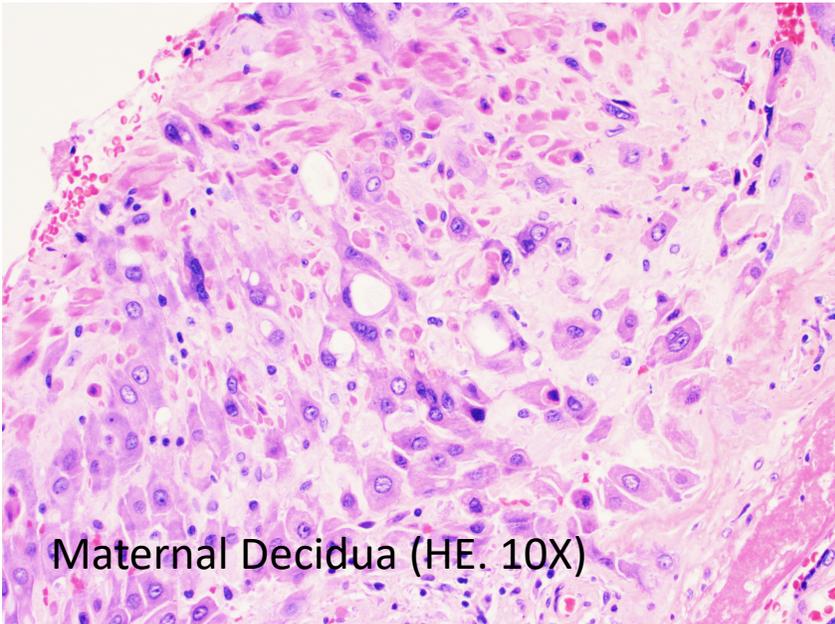
HE. 40X



Fetal Membrane (HE. 10X)



Maternal Decidua. (HE 4x)



Maternal Decidua (HE. 10X)

Final Diagnosis: Bizarre Chorionic-Type Trophoblast

Bizarre chorionic-type trophoblast is a recently described intraplacental lesion consisting of nest or plaque of chorionic-type trophoblast embedded in a hyalinized matrix incidentally found in a second or third trimester placenta. The lesion commonly involves the intervillous trophoblastic island, but placental septae, chorionic plate or fetal membrane can also be involved. The lesional cells display ample amount of eosinophilic cytoplasm, large bizarre nuclei with vesicular to smudgy chromatin and occasional nuclear pseudoinclusions. However, mitotic activity and necrosis are not present. According to the original description of 17 cases by Murdock et al (AJSP,2022,46:258-267), the lesion is likely a pseudoneoplastic process. However, in contrast to the observed low Ki-67 labeling index of <10% by Murdock, the current case is remarkable for an increased Ki-67 labeling index among bizarre trophoblast, estimated at 40%, and the significance of which is unknown. The patient has an uneventful 11 years of follow-up after her delivery.

Differential diagnoses include APSN, ETT and intraplacental choriocarcinoma. Atypical placental site nodule (APSN) is an incidental, microscopic finding in endometrial or cervical biopsy or curettage (Y-GTD case of October 2022). Epithelioid trophoblastic tumor (ETT) is a destructive neoplasm generally arising from the uterine corpus or cervix years after its causative gestation (Y-GTD case of January 2023). Both APSN and ETT are not intraplacental lesions. Intraplacental choriocarcinoma (in-situ choriocarcinoma in the early literature) can be found in third trimester placenta as small to microscopic intraplacental lesion that has characteristic haphazard biphasic growth of mononuclear trophoblast and syncytiotrophoblast with marked cytological atypia, brisk mitotic activity and very high Ki-67 labeling index.