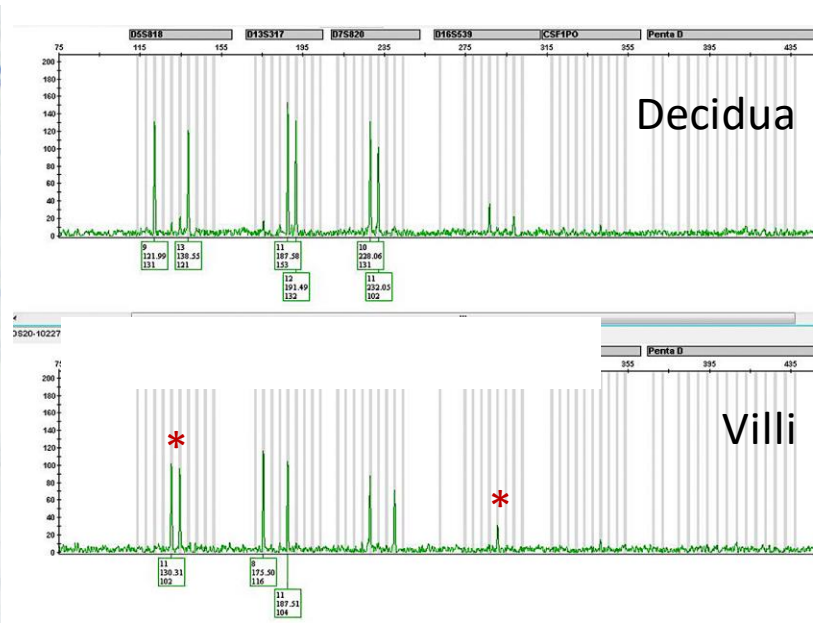
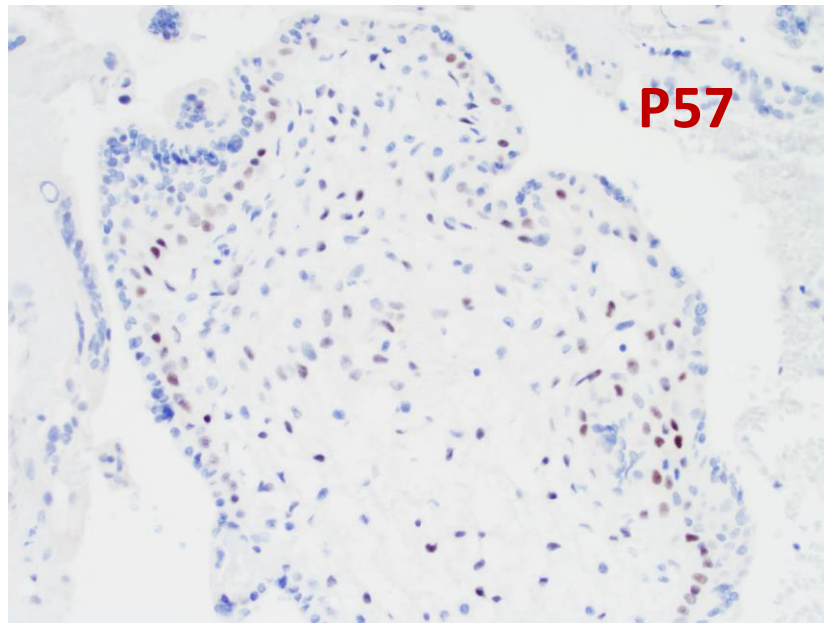
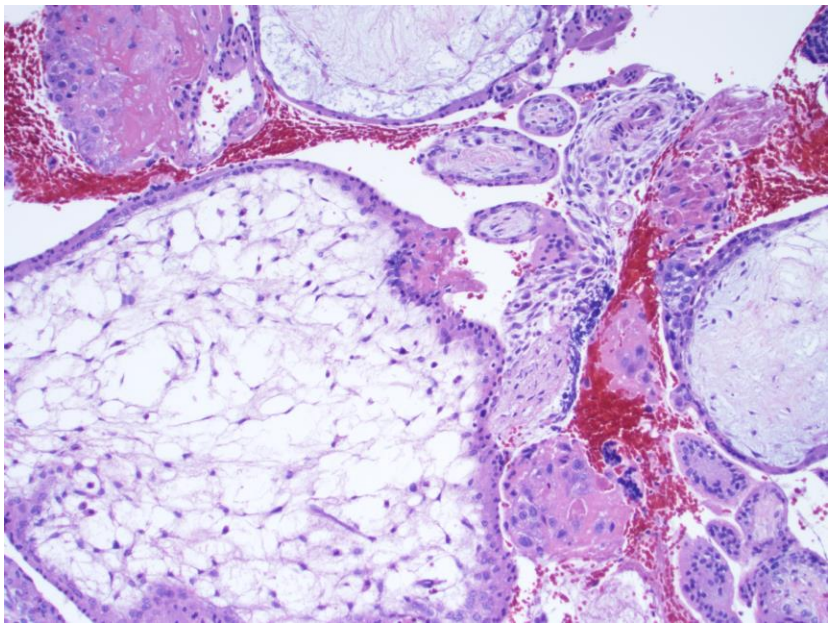
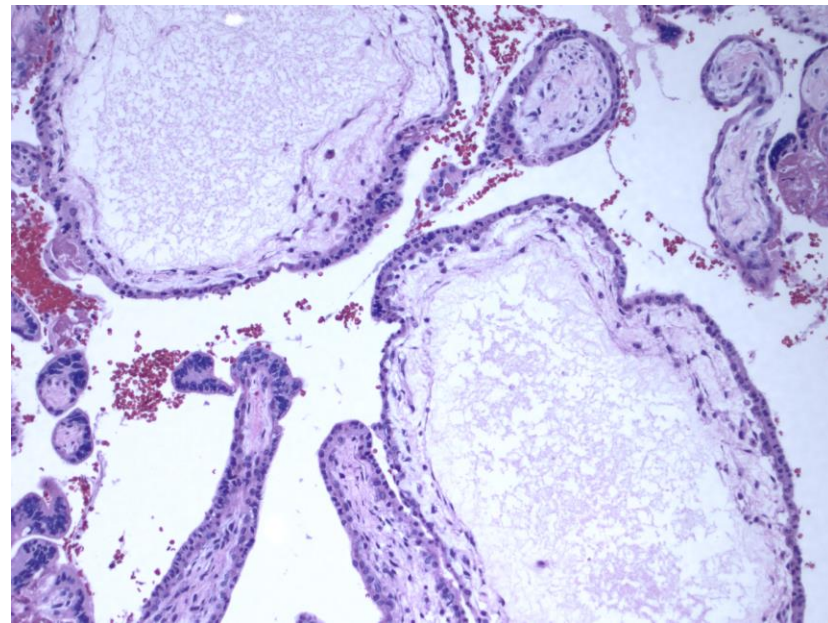
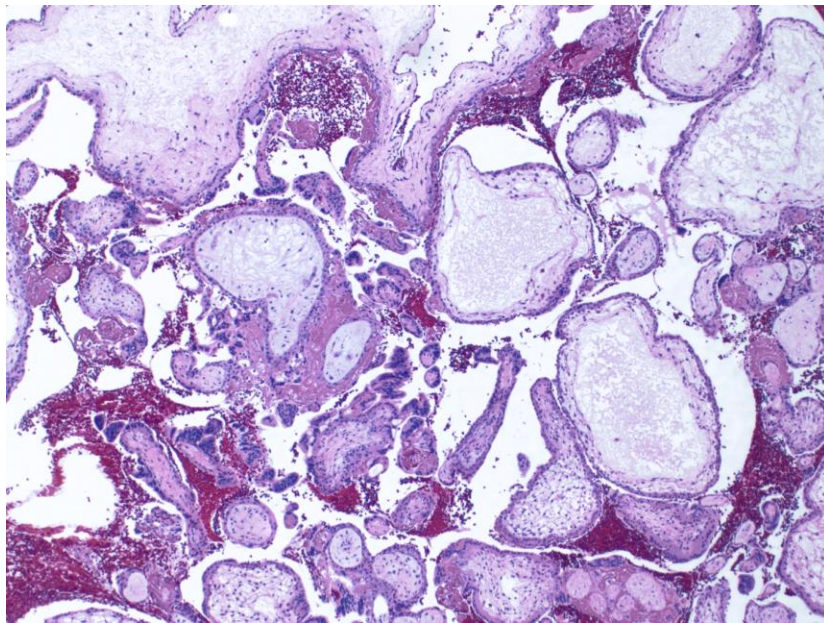
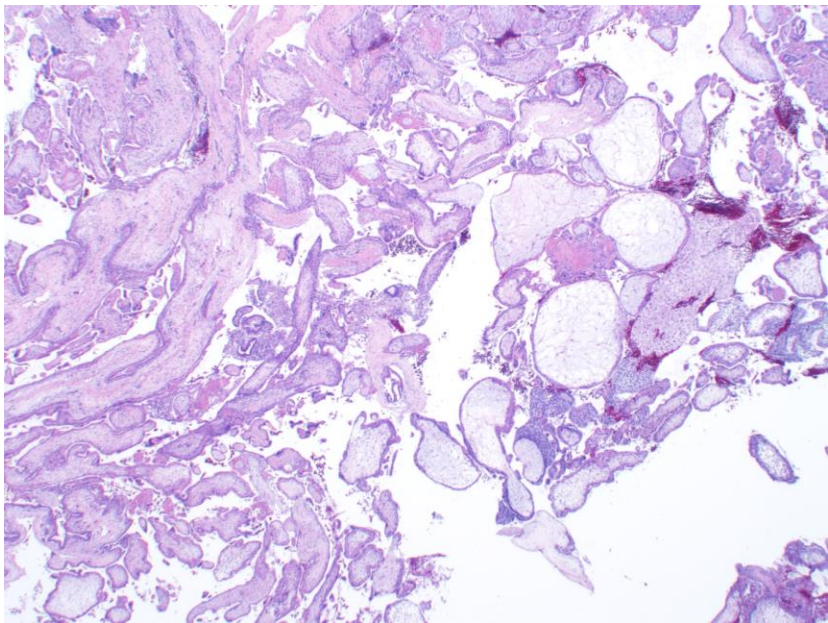




33-year-old woman presenting with missed abortion.  
Uterine D/C was performed.







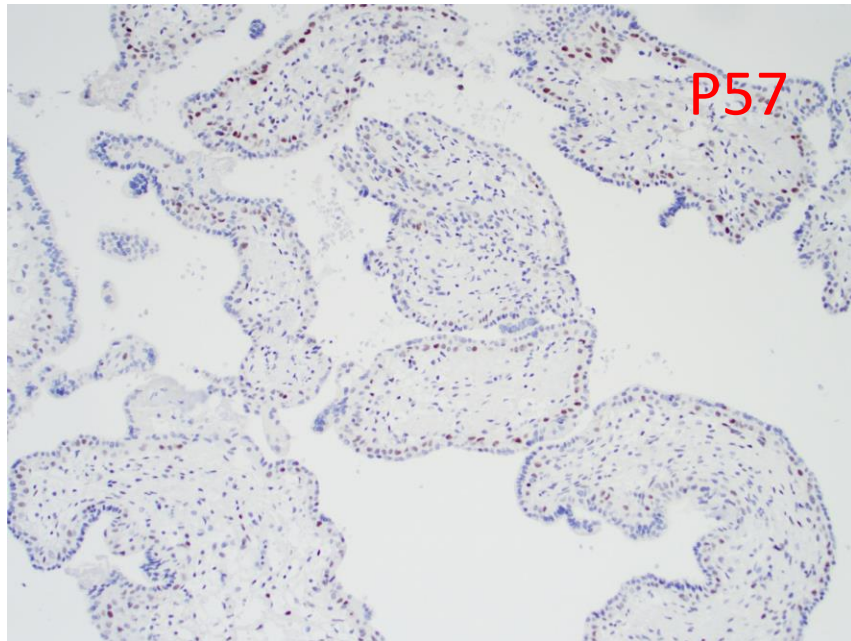
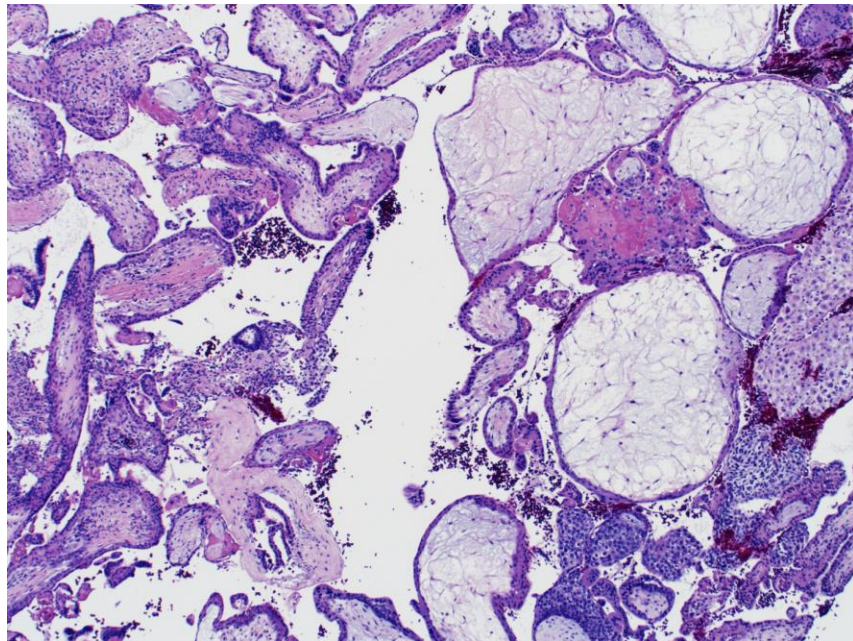
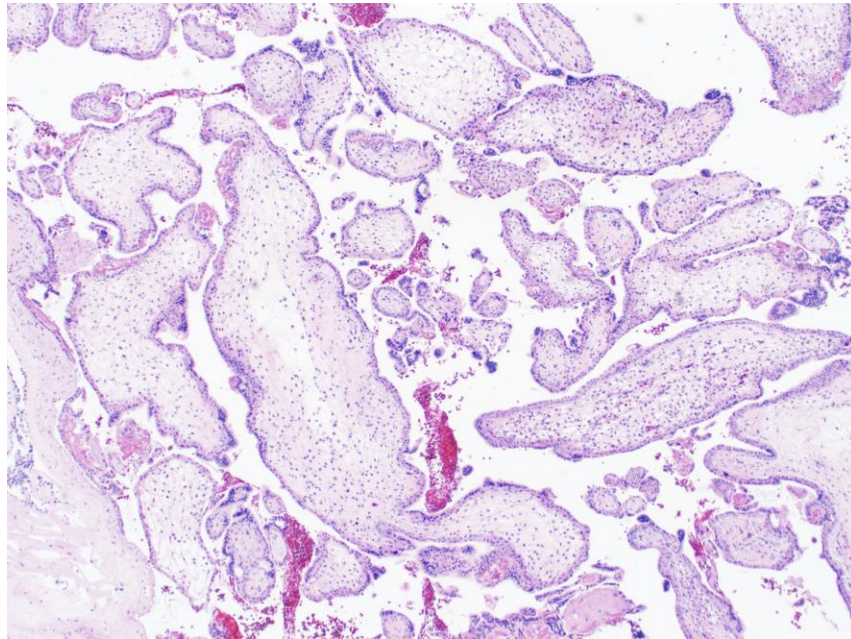
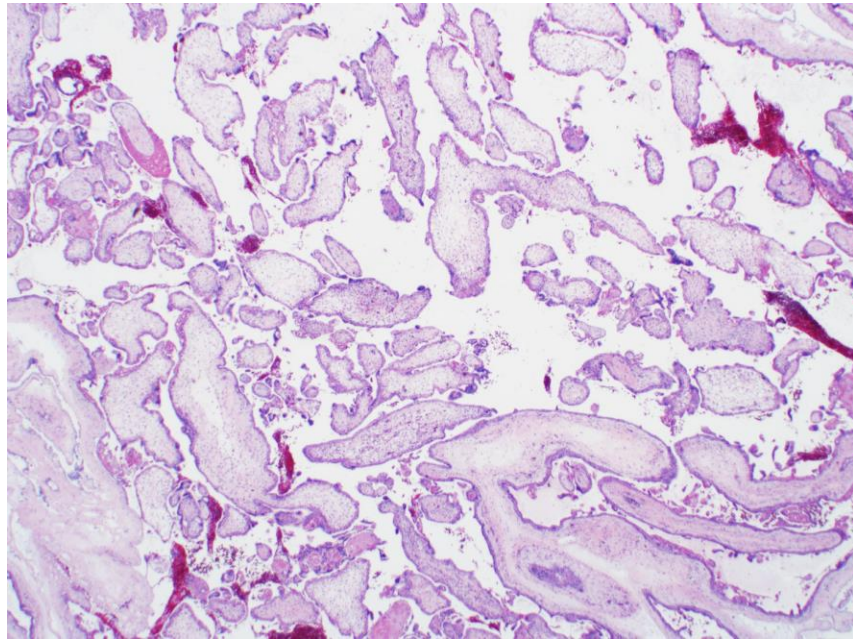
# Diagnostic Options

A: Complete Mole

B: Partial Mole

C: Hydropic Abortion

C: Egg Donor Gestation



Additional Figures

Final Diagnosis: Egg Donor Non-molar Gestation

**Case Description:** Chorionic villi are remarkably abnormal with two distinct morphologic populations: fibrotic non-hydropic villi and markedly hydropic villi with cistern formation. Focal abnormal trophoblast hyperplasia is also present. P57 immunostaining shows a normal expression pattern in the cytotrophoblast and villous stromal cells. DNA genotyping demonstrates the presence of distinct allele(s) in the chorionic villi, non-overlapping with the maternal alleles at 7 (asterisks) of 12 informative STR loci, highly suggestive of dispermic complete mole (diandric paternal-only genome). However, the sharp discrepancy among the histology, P57 immunohistochemistry and STR genotype is against a diagnosis of either partial or complete mole, and a possibility of egg donor gestation becomes a differential diagnosis. In this case, a subsequent medical history review timely confirmed such a suspicion.



The current case illustrates an important pitfall of STR genotyping diagnosis of molar gestations in a patient with egg donor gestation. As the donated egg shares no genetic inheritance with the patient carrying the gestation, the absence of maternal alleles in the chorionic villi may easily lead to an erroneous interpretation as a dispermic (diandric paternal-only) complete mole.

**Take-home-message:** Close correlation of the STR genotyping data with histomorphology, P57 immunohistochemistry, and medical record review is crucial to avoiding a misdiagnosis of egg donor gestation as complete hydatidiform mole and subsequent clinical mismanagement of the patient.