A case of complete hydatidiform mole and coexistent viable fetus and literature review
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Objective
The occurrence of a complete hydatidiform mole and coexisting live fetus (CHMCF) is rare. The incidence has been estimated to be in the range of 1 in 22,000-100,000 pregnancies. The aim of this study is to report the clinical features, management, and outcome of a complete hydatidiform mole with a coexisting viable fetus, in the context of a review of the available literature.

Methods
Case report.

Results
A 39-year-old female, G3 P3, presented with vaginal bleeding at 10 weeks of gestation. First trimester ultrasound was conducted at a regional hospital, and was found to be normal. She was referred to our clinic for amniocentesis at 17 weeks of gestation due to increased level of serum hCG (447 369 mIU/ml -18, 5 MoM). Ultrasound examination demonstrated a normally growing live fetus alongside a normal placenta, and an additional intrauterine echogenic vascularized mass measuring 15x5cm with features of hydatidiform mole. There were no signs of mole invasion. Genetic amniocentesis showed normal fetal karyotype, 46, XX. The patient was carefully monitored for development of preeclampsia, hyperthyroidism and anemia. A chest X-ray and abdominal ultrasound were performed. After appropriate counseling about the disease and the risks involved with CHMCF, the parents opted for the interruption of the ongoing pregnancy. Due to a previous operative delivery, the current pregnancy was terminated at 21 weeks of gestation by Sectio Caesarea Parva. During surgery a normally developed female fetus was observed. Alongside a normal placenta, a mass consisting of vesicles in various size was removed. Histological examination of the abnormal mass confirmed complete hydatidiform mole. Prophylactic treatment with methotrexate was administered postoperatively. Serial maternal serum hCG levels showed a declining trend up to five weeks after abortion, but then started to increase. Ultrasound examination showed a well-vascularized mass in the uterine cavity, and a persistent gestational trophoblastic neoplasia (GTN) was diagnosed. Metastatic disease was not found. According to the FIGO staging T1 N0 M0, the patient was in a low risk group, and single-agent chemotherapy with methotrexate was ordered. Contraception with progestin-only pill was also prescribed to avoid masking GTN by a rise in hCG in normal pregnancy. Discussion: There have been about 200 registered cases of twin pregnancy with CHMCF reported in literature. Frequently, ultrasound diagnosis is made during the first trimester, but since the features of hydatidiform mole might be uncertain at such an early stage, or an echogenic mass may be mistaken for a hematoma, diagnosis can be missed at that time. When the diagnosis of a CMCF pregnancy is suspected, the karyotype of the co-existent fetus should be obtained. As triploid fetuses with a partial mole are likely to die before mid-pregnancy, termination of pregnancy is recommended as soon as the diagnosis is made. When a normal diploid karyotype is found, the most probable diagnosis is a dizygotic twin pregnancy with a complete mole. In such circumstances, it remains controversial whether to continue or terminate the pregnancy. Possible maternal complications associated with molar pregnancy are early-onset preeclampsia, hyperemesis gravidarum, hyperthyroidism, vaginal bleeding, anemia, development of theca lutein ovarian cysts, respiratory distress because of trophoblastic embolization to the lungs, and persistent gestational trophoblastic tumor. Patients should be carefully monitored and receive thorough counseling. In our case, the patient chose to terminate the pregnancy. Five weeks following the termination of the pregnancy, persistent trophoblastic disease was diagnosed. According to the literature, the risk of persistent trophoblastic neoplasia after CHMCF is 19% to 54%. Our patient had a low risk neoplasia score and received chemotherapy. She is disease-free at 4 months post-treatment. According to the literature, no mothers have died as a result of persistent trophoblastic disease that develops after a CHMCF, so the prognosis appears to be good in such cases.

Conclusion
The prenatal diagnosis of twin pregnancy with CHMCF was based on ultrasound findings, abnormally elevated serum hCG levels, and normal fetal karyotype. In our case, the patient chose pregnancy termination. She developed persistent trophoblastic disease, but should have a good prognosis following treatment. Due to the rarity of the disease and risk of severe maternal complications, the decision whether to continue or discontinue the pregnancy is challenging and optimal management remains uncertain.