

DR NAYAB SAAD,
MR HASHEM ELHOSSAMY

CASE REPORT: THE UNEXPECTED TWIST: FROM ECTOPIC
SUSPICION TO CHORIOCARCINOMA DIAGNOSIS



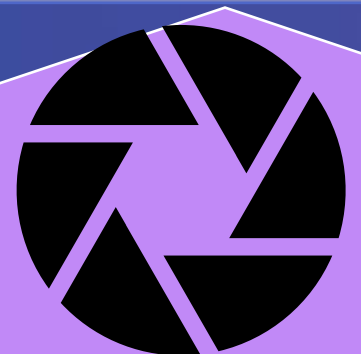
INTRODUCTION

Choriocarcinoma is a rare and aggressive form of gestational trophoblastic disease that can occur after a normal or molar pregnancy. It is characterized by abnormal proliferation of trophoblast cells and can lead to metastasis, most commonly to the lungs, liver, brain, and pelvis. The clinical presentation of choriocarcinoma often mimics ectopic pregnancy, particularly in patients with elevated human chorionic gonadotropin (hCG) levels. The ability to distinguish between these two conditions is crucial as their management differs significantly. This case report discusses the diagnostic challenges and eventual diagnosis of choriocarcinoma in a woman who presented with signs suggestive of an ectopic pregnancy.



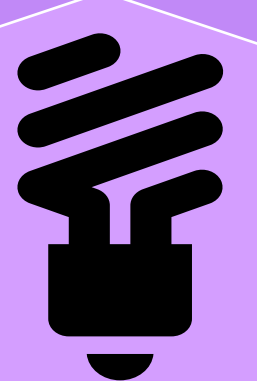
CASE PRESENTATION

A 35-year-old P2 woman presented with two weeks of intermittent vaginal bleeding with clots but no abdominal or systemic symptoms. Her vitals were within normal limits. Abdomen examination did not reveal any abdominal mass. Speculum and bimanual examination were unremarkable. She had a positive pregnancy test and an ultrasound showed a thin endometrium, retroverted uterus, free pelvic fluid, but no visible gestation despite an elevated serum hCG of 169,863.8 mIU/mL, Repeat imaging also showed no intrauterine or ectopic pregnancy. Further investigation was prompted by the discordant hCG and imaging findings. After multidisciplinary discussion, A CT scan was performed that revealed multiple pulmonary nodules and a thrombus in the pulmonary vein, along with a left adnexal tubular structure suggestive of ovarian vein thrombosis. The constellation of findings—high hCG, lung metastases, and vascular involvement—suggested a diagnosis of choriocarcinoma. The patient was referred to a specialist centre and commenced on MAC-VIC chemotherapy (Methotrexate, Etoposide, Dactinomycin, Vincristine, Cyclophosphamide).She is currently under follow-up with ongoing clinical improvement.



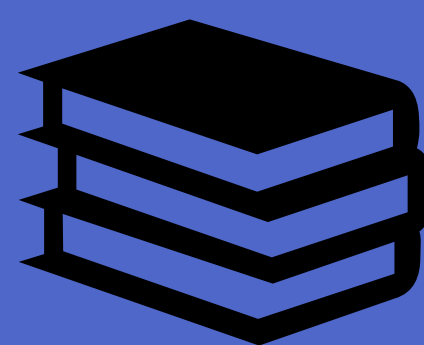
DISCUSSION

Choriocarcinoma is a malignant trophoblastic neoplasm often presenting with elevated hCG, abnormal vaginal bleeding, and early metastasis—commonly to the lungs. It may mimic ectopic pregnancy when ultrasound findings are inconclusive. In this case, initial suspicion of ectopic pregnancy shifted to metastatic choriocarcinoma following high hCG levels and CT evidence of pulmonary and ovarian vein involvement. These findings underscore the importance of considering neoplastic causes in patients with atypical or discordant features during the diagnostic workup of suspected ectopic pregnancy.



CONCLUSION

This case highlights the diagnostic challenges in differentiating between ectopic pregnancy and choriocarcinoma, especially in the context of elevated hCG levels and inconclusive ultrasound findings. Choriocarcinoma should be considered in the differential diagnosis of women with abnormal bleeding and high hCG levels, particularly when ectopic pregnancy is suspected but not confirmed on imaging.



LITERATURE REVIEW

Choriocarcinoma is a highly malignant subtype of gestational trophoblastic neoplasia (GTN), characterized by early hematogenous spread, most commonly to the lungs, liver, and brain . Although rare, it can follow any gestational event—including normal pregnancy, abortion, ectopic pregnancy, or molar pregnancy .

- Due to symptom overlap, choriocarcinoma is often misdiagnosed as an ectopic pregnancy. Both conditions present with amenorrhea, vaginal bleeding, pelvic pain, and elevated β -hCG. However, β -hCG levels in choriocarcinoma are typically markedly elevated (>100,000 mIU/mL), unlike in ectopic pregnancy. Lack of intrauterine pregnancy on ultrasound and persistent or rising β -hCG should raise clinical suspicion for GTN .
- The lungs are the most frequent site of metastasis, occurring in up to 80% of patients with metastatic choriocarcinoma. Imaging may reveal multiple pulmonary nodules, sometimes described as "cannonball lesions", or evidence of pulmonary vascular involvement Diagnosis is clinical and biochemical; biopsy is rarely needed. FIGO scoring is used to stratify risk and guide chemotherapy. Treatment is primarily chemotherapy:
- **Low-risk GTN:** single-agent methotrexate or actinomycin-D.
- **High-risk GTN:** multi-agent regimens like EMA-CO or MAC-VIC.
- Prognosis is excellent with early intervention, boasting cure rates >90% even with metastatic disease. Delay in diagnosis, especially when misdiagnosed as ectopic pregnancy, can lead to complications or resistance.