

# Persistently rising Beta-HCG in pregnancy of unknown location

## Suggestive of choriocarcinoma

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### Objectives

This case is reported due to its rarity and diagnostic complexity, involving persistent beta-hCG elevation in a pregnancy of unknown location (PUL). Despite initial management of PUL with methotrexate, and negative laparoscopy for ectopic pregnancy, patient's rising beta-hCG ultimately led to a diagnosis of choriocarcinoma, highlighting the challenges in distinguishing between gestational trophoblastic neoplasia and other causes of PUL.

### Case Report

27-year-old woman, 6 weeks pregnant, presented with progressively increasing serum beta-hCG levels (rising by >66 % every 48 hrs). Ultrasound initially revealed PUL, Eventually methotrexate was given but Beta-HCG continued to rise to 7000 mIU/ml. At this time, ultrasound revealed a suspicious mass of 3 cm in the right ovary suggestive of ectopic. Laparoscopy was performed, revealing no ectopic pregnancy, and endometrial curettings were negative for intrauterine Pregnancy or trophoblastic tissue. Beta-hCG levels continued to escalate, reaching 21,000 mIU/mL. Choriocarcinoma was suspected, and the patient was referred for chemotherapy. Following treatment, beta-hCG levels decreased, confirming the diagnosis. The patient responded well to chemotherapy, achieving remission.

### Discussion

This case underscores the diagnostic challenges in managing PUL with rising beta-hCG levels. It also illustrates the value of considering GTD (although rare) in differential diagnoses for persistently elevated beta-hCG levels, even in the absence of classic features like uterine masses or widespread metastases.

Early recognition and referral for chemotherapy are critical for favorable outcomes. The ovarian mass initially suggested an ectopic pregnancy but was ultimately unrelated. This misinterpretation emphasizes the need for heightened clinical suspicion for GTD when beta-hCG levels continue to rise despite standard management.



### Conclusions

Persistent beta-hCG elevation in PUL requires a broad differential diagnosis, including GTD. Early diagnosis is crucial for initiating appropriate treatment.

Policy and Education: Increased awareness and education regarding atypical presentations of choriocarcinoma may improve early diagnosis and outcomes. This case supports the evolving understanding of GTD as a diagnostic consideration in atypical cases of PUL with rising beta-hCG.