CASE REPORT
Indonesia Journal of Biomedical Science (*IJBS*) 2025, Volume 19, Number 1: 42-45
P-ISSN.2085-4773, E-ISSN.2302-2906

Published by
Indonesia Journal of Biomedical Science

Partial hydatidiform mole in a perimenopausal woman: a case report

Nadia Iftari Darwizar[1*], Gatot Nyarumenteng Adhipurnawan Winarno[1], Budi Handono[1]

[1]Department of Obstetrics and Gynecology, Hasan Sadikin General Hospital-Universitas Padjadjaran, Bandung, Indonesia

*Corresponding author:
Nadia Iftari Darwizar; Department of Obstetrics and Gynecology, Hasan Sadikin General Hospital-Universitas Padjadjaran, Bandung, Indonesia;
nadia23011@mail.unpad.ac.id

Received: 2026-02-27
Accepted: 2026-04-10
Published: 2026-05-04

ABSTRACT

Background: Hydatidiform mole is part of gestational trophoblastic disease that commonly occurs in women of reproductive age. Its occurrence in perimenopausal women is rare and often poses diagnostic challenges due to atypical clinical presentation, a long interval since the last pregnancy, and low suspicion of pregnancy. This condition carries a risk of delayed diagnosis and progression to gestational trophoblastic neoplasia (GTN) if not recognized early.

Case Illustration: A 52-year-old woman, G7P5A1, presented with vaginal bleeding for three months prior to admission. Examination revealed elevated β-hCG levels, characteristic ultrasound findings of a molar pregnancy with suspected myometrial invasion, Doppler hypervascularization, and no evidence of metastasis. The patient underwent stabilization, blood transfusion, and molar evacuation via curettage. Histopathological examination confirmed partial hydatidiform mole with excessive trophoblastic proliferation. The patient was then scheduled for periodic β-hCG level evaluation through serial examinations.

Conclusion: Hydatidiform mole in perimenopausal women requires high clinical vigilance. The integration of clinical findings, β-hCG testing, ultrasound, and Doppler plays an important role in establishing the diagnosis and early detection of suspected malignancy. Adequate post-evacuation monitoring is key to preventing delayed diagnosis of GTN and achieving an optimal prognosis.

Keywords: Hydatidiform mole, perimenopause, gestational trophoblastic disease.
Cite this Article: Darwizar, N.I., Winarno, G.N.A., Handono, B. 2025. Partial hydatidiform mole in a perimenopausal woman: a case report. *IJBS* 19(1): 42-45. DOI: 10.15562/ijbs.v19i1.670

INTRODUCTION

Gestational trophoblastic disease (GTD) is a group of neoplasms originating from abnormal proliferation of trophoblasts, cells that form the main part of the placenta.[1] Histologically, GTD includes premalignant forms such as partial hydatidiform mole and complete hydatidiform mole, as well as malignant forms such as invasive mole, choriocarcinoma, placental site trophoblastic tumour (PSTT), and epithelioid trophoblastic tumour (ETT). The latter three forms are classified as gestational trophoblastic neoplasia (GTN), which can arise after various types of pregnancy.[2] Although most cases of gestational trophoblastic disease have an excellent prognosis with appropriate management, delayed diagnosis and inadequate follow-up can increase morbidity and the risk of malignancy.[3,4]

Hydatidiform mole and GTN in premenopausal or perimenopausal women are rare, but clinically significant. In this age group, abnormal uterine bleeding is more commonly associated with other gynaecological malignancies such as endometrial carcinoma or uterine sarcoma, leading to low suspicion of gestational trophoblastic disease and delayed diagnosis.[5,6] Additionally, the long interval since the last pregnancy, nonspecific symptoms, and patients' limited awareness of the possibility of pregnancy further complicate diagnosis. Advanced maternal age itself is known as a risk factor for abnormal fertilization and an increased risk of hydatidiform mole and progression to GTN.[7]

This case report presents a perimenopausal woman with partial hydatidiform mole accompanied by Doppler ultrasound findings suggestive of malignancy, severe anaemia, and delayed post-evacuation monitoring. This case aims to highlight the diagnostic challenges of gestational trophoblastic disease in perimenopausal women, evaluate the role of Doppler ultrasound as an early predictor of malignancy, and discuss the implications of surgical and chemotherapy management on patient prognosis.

CASE ILLUSTRATION

A 52-year old woman was referred to Hasan Sadikin Hospital with suspected gestational trophoblastic tumour accompanied by severe anaemia. The patient complained of vaginal bleeding for the past three months, which worsened four days before admission with the amount of bleeding soaking about two sanitary pads per day. The patient also admitted to passing vesicle-like tissue resembling fish eggs. She denied complaints of abdominal pain and fever. The patient knew she had

been pregnant for three months based on an examination by a midwife, but did not seek further evaluation from a physician.

Physical examination revealed that the patient's general condition and vital signs were within normal limits, with a body mass index of 17.5 kg/m², concluded as underweight. Examination of the conjunctiva revealed anaemia and the uterus was palpably enlarged, consistent with a gestational age of approximately 10–12 weeks.

Laboratory evaluation on November 17, 2025 showed the hemoglobin level was 5.8 g/dL and hematocrit was 18.6%, indicating severe anemia. The leukocyte count was 7,600/µL and platelet count was 244,000/µL, both within normal limits. Quantitative β-hCG level was 56,826.7 mIU/mL, consistent with pregnancy.

An ultrasound examination displayed the uterus in an anteflexed position with inhomogeneous density, measuring 7.51 × 7.29 × 4.60 cm, and no visible endometrial line (**Figure 1**). A vesicular pattern was seen within the uterine cavity invading the myometrium with a color score of +4. No masses were seen in both adnexa. No free intra-abdominal fluid was seen. The conclusion of the examination was a suspected invasive mole. Additional supporting examinations in the form of X-rays showed no visible intrapulmonary metastasis. However, cardiomegaly was found.

After clinical and supporting examinations, the patient was diagnosed with suspected invasive mole with severe anemia. Management included improving the patient's general condition, administering packed red cell (PRC) transfusions to achieve a target hemoglobin level of >10 g/dL, administering 500 mg of tranexamic acid three times a day intravenously, and planning for mole evacuation. The procedure yielded approximately 70 grams of retained conception tissue. Bleeding during the procedure was controlled, with intraoperative bleeding approximately 50 cc.

On December 2, 2025, the patient underwent a follow-up visit to the Oncology Clinic, and a quantitative β-hCG examination showed 31,288.8 mIU/mL. The anatomical pathology examination concluded a partial hydatidiform mole with excessive trophoblast proliferation. Further management includes regular quantitative β-hCG examinations and education to the patient and family regarding the disease, monitoring plans, and adherence to follow-up checks.

DISCUSSION

In this case, the patient presented with three months of increasingly severe vaginal bleeding, accompanied by the passage of tissue resembling a "fish egg vesicle", a classic feature of hydatidiform mole. The β-hCG level, which reached 56,826.7 mIU/mL, was relatively high and inconsistent with the presentation of a normal pregnancy at the expected gestational age, thus raising suspicion of gestational trophoblastic disease.

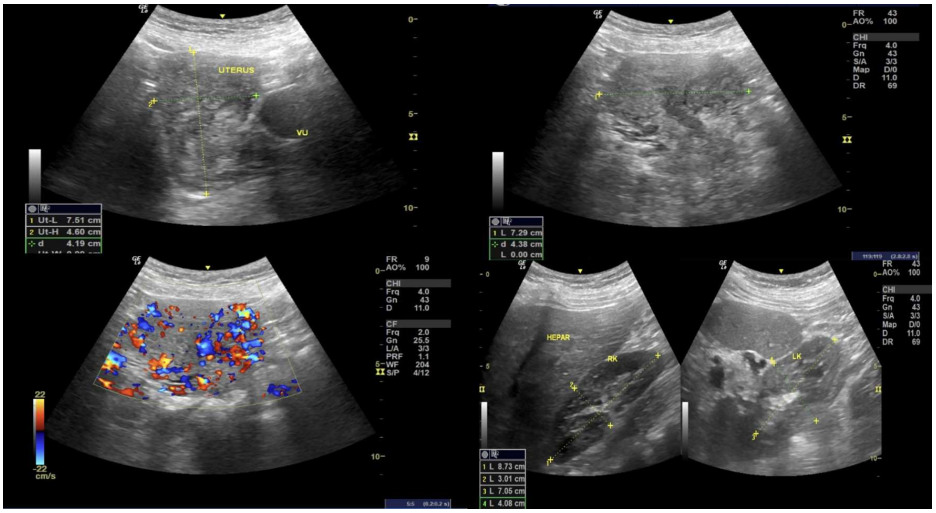

Figure 1. Gynecologic Ultrasound

Gestational trophoblastic neoplasia (GTN) is a spectrum of malignancies arising from abnormal trophoblastic proliferation and classically associated with women of reproductive age after molar or non-molar pregnancies. GTN in perimenopausal women is rare and often presents a diagnostic challenge due to its atypical clinical presentation, long time interval since the previous pregnancy, and overlap with other more common gynecologic malignancies. Abnormal uterine bleeding in this age group is more often attributed to endometrial carcinoma, leiomyosarcoma, or benign structural abnormalities, so suspicion of GTN and appropriate diagnostic processes are often delayed.[8]

Doppler ultrasonography has emerged as a valuable adjunct imaging modality in the evaluation of gestational trophoblastic disease, particularly GTN, due to its ability to assess tumor-related neovascularization. GTN is characterized by intense angiogenesis and the formation of arteriovenous shunts, resulting in a hypervascular appearance with low-resistance blood flow on Doppler examination. Several studies have shown that a decreased uterine artery resistance index (RI) and pulsatility index (PI), as well as a disorganized intramyometrial vascular pattern, are closely associated with invasive disease and malignant transformation. These Doppler abnormalities can appear early in the disease course and, in some cases, precede biochemical progression detected by serial β-hCG measurements.[9]

The role of Doppler ultrasonography as an early predictor of GTN is particularly relevant in post-molar monitoring and in patients with poor compliance or delayed biochemical follow-up. Persistence of low-resistance blood flow in the uterus or intramyometrial lesions after uterine evacuation has been reported to correlate with the development of GTN, while normalization of the Doppler index is associated with spontaneous remission. Furthermore, in non-malignant cases, improvement in Doppler findings has been reported to occur earlier than normalization of β-hCG levels, supporting the potential of Doppler as an early warning marker. In perimenopausal women, who physiologically have a lower uterine vascularity, the discovery

of marked hypervascularity is an unusual finding and should raise suspicion of trophoblastic malignancy rather than benign processes or age-related changes.[9]

Despite its advantages, Doppler ultrasonography cannot be used as a sole diagnostic tool. Overlapping vascular features can occur in other conditions such as retained gestational tissue, uterine arteriovenous malformations, and other uterine malignancies. Furthermore, the Doppler parameters used vary between studies, and there is no universally agreed-upon threshold value, limiting the reproducibility of results. Therefore, Doppler findings must be interpreted comprehensively in conjunction with the clinical presentation, serum β-hCG levels, and histopathological confirmation.[10,11]

Evacuation of hydatidiform mole is most recommended by suction dilation and curettage (D&C), preferably using ultrasound guidance, regardless of uterine size, especially in patients who wish to preserve their fertility. The use of prostaglandins for cervical ripening is not recommended, as they can stimulate uterine contractions and increase the risk of trophoblastic embolism to the lungs. Hysterectomy is rarely recommended, unless the patient desires permanent sterilization or is approaching menopause.[12]

The main challenge in surgical management is the risk of massive bleeding, which is related to the highly vascularized mole tissue. This is particularly relevant in this patient, who presented with severe anemia (Hb 4.9 g/dL) due to chronic vaginal bleeding. This condition requires prior hemodynamic stabilization with packed red blood cells (PRBC) transfusion before safe evacuation can be performed.[13]

Approximately 15–20% of patients with complete moles and 4–6% with partial moles may develop GTN after evacuation. Because there are no early clinical signs to predict this, regular monitoring of β-hCG levels is the gold standard. Tests are performed every 1–2 weeks until β-hCG levels become undetectable, to detect the presence of persistent trophoblastic tissue that characterizes GTN.[12]

A study by Desmarais et al. analyzed the effect of initial management with hysterectomy compared with uterine evacuation on the incidence of post-molar GTN and the need for further chemotherapy in women aged ≥ 40 years with complete hydatidiform mole. The results showed that hysterectomy was associated with a significantly reduced risk of GTN and a lower chemotherapy requirement compared with uterine evacuation. These findings indicate that hysterectomy can be considered as an alternative initial therapy in this patient group, especially in women who no longer desire to preserve fertility. However, although the oncological outcomes between the two approaches are relatively comparable, consideration of the surgical aspects is still necessary because hysterectomy is associated with procedural complications, particularly an increased need for concentrated red blood cell transfusions.[14]

CONCLUSION

Hydatidiform mole in perimenopausal women is a rare condition and often difficult to diagnose due to atypical symptoms and low suspicion of pregnancy. A combination of clinical findings, β-hCG levels, ultrasonography, and Doppler are essential for early detection of possible trophoblastic malignancy. Doppler examination can help raise the suspicion of malignancy in perimenopausal women. Close post-evacuation β-hCG monitoring is essential to ensure timely diagnosis and a good prognosis.

DISCLOSURES

FUNDING

Personal funding without any third-party source of funding.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTION

All authors have a proportional contribution to this study.

ETHICAL CONSIDERATION

The patient had signed written informed consent regarding publication of a case report in a medical journal, with confidentiality to personal information.

GENERATIVE AI DISCLOSURE STATEMENT

The authors declare that no generative Artificial Intelligence (AI) tools were used in the preparation, writing, data analysis, interpretation, or editing of this manuscript. The entire content of this article is the original work of the authors. The authors take full responsibility for the integrity and accuracy of the manuscript.

REFERENCES

1. Bruce S, Sorosky J. Gestational Trophoblastic Disease. [Updated 2024 Feb 25]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2026 Jan-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK470267/
2. Kaur B. Pathology of gestational trophoblastic disease (GTD). Best Pract & Res Clin Obstet & Gynaecol. 2021;74:3–28. Available from: http://dx.doi.org/10.1016/j.bpobgyn.2021.02.005
3. Winter MC. Treatment of low-risk gestational trophoblastic neoplasia. Best Pract & Res Clin Obstet & Gynaecol. 2021;74:67–80. Available from: http://dx.doi.org/10.1016/j.bpobgyn.2021.01.006
4. Braga A, Berkowitz R, Horowitz N. Etiology, Natural History, and Management of Recent Advances in Molar Pregnancy. Obstet Anesth Dig. 2026;46(1):12–4. Available from: http://dx.doi.org/10.1097/01.aoa.0001178608.65370.10
5. Da Silva Santos T, Santos Monteiro S, Pereira MT, Garrido S, Leal M, Andrade C, et al. Severe Hyperthyroidism and Complete Hydatidiform Mole in Perimenopausal Woman: Case Report and Literature Review. Cureus. 2022; Available from: http://dx.doi.org/10.7759/cureus.22240
6. Wan Y, Jiang G, Jin Y, Hao Z. Perimenopausal giant hydatidiform mole complicated with preeclampsia and hyperthyroidism: A case report and literature review. Open Med. 2021;16(1):1038–42. Available from: http://dx.doi.org/10.1515/med-2021-0315
7. Ngan HYS, Seckl MJ, Berkowitz RS, Xiang Y, Golfier F, Sekharan PK, et al. Update on the diagnosis and management of gestational trophoblastic disease. Int J Gynecol & Obstet. 2018;143(S2):79–85. Available from: http://dx.doi.org/10.1002/ijgo.12615
8. Imen G, Malek M, Dhekra T, Manel N, Yosra J, Ahmed H. Trophoblastic tumor in perimenopausal women: A case report and literature review. Int J Surg Case Rep. 2025;129:111130. Available from: http://dx.doi.org/10.1016/j.ijscr.2025.111130
9. Lin LH, Bernardes LS, Hase EA, Fushida K, Francisco RP V. Is Doppler ultrasound useful for evaluating gestational trophoblastic disease? Clinics. 2015;70(12):810–5. Available from: http://dx.doi.org/10.6061/clinics/2015(12)08
10. Lin LH, Polizio R, Fushida K, Francisco RPV. Imaging in Gestational Trophoblastic Disease. Semin Ultrasound, CT MRI. 2019;40(4):332–

49. Available from: http://dx.doi.org/10.1053/j.sult.2019.03.002
11. Malek M, Moradi B, Mousavi AS, Ahmadinejad N, Kazemi MA, Gity M. Complementary Role of Ultrasound in Management of Gestational Trophoblastic Disease. Iran J Radiol. 2014;12(2). Available from: http://dx.doi.org/10.5812/iranjradiol.13955
12. Williams Gynecology By John Schorge, Joseph Schaffer, Lisa Halvorson, Barbara Hoffman, Karen Bradshaw, and F. Cunningham. J Midwifery & Women's Heal. 2010;55(4). Available from: http://dx.doi.org/10.1016/j.jmwh.2010.05.004
13. Creasman WT, Mutch DG, Mannel RS, Tewari KS. Preface [Internet]. DiSaia and Creasman Clinical Gynecologic Oncology. Elsevier; 2023. p. vi. Available from: http://dx.doi.org/10.1016/b978-0-323-77684-4.00004-0
14. Desmarais CCF, Maestá I, Sun SY, de Rezende-Filho J, de Araújo Costa RA, Lin LH, et al. Initial Treatment and Outcomes of Complete Hydatidiform Mole in Women 40 Years or Older: A Multicenter Cohort Study. Cancers (Basel). 2025;17(19):3125. Available from: http://dx.doi.org/10.3390/cancers17193125