



# The Role of Uterine Artery Embolization in massive vaginal bleeding caused by Gestational tumor: Case Report

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## Introduction:

Massive vaginal bleeding is an obstetrical emergency which has multiple therapy options. We present an emergency case of gestational tumor associated with massive vaginal bleeding to demonstrate the beneficial effects of the uterine artery embolization in the therapy management.

## Case presentation:

A 50-year-old female (gravida 10, para 8) presented with one-week history of massive and continuous vaginal bleeding with drop in hemoglobin level to 7 g/dl.

Transvaginal ultrasound showed enlarged uterus, with irregular heterogeneous and highly vascular thickened myometrium and cystic formations raising a suspicion of gestational tumor.

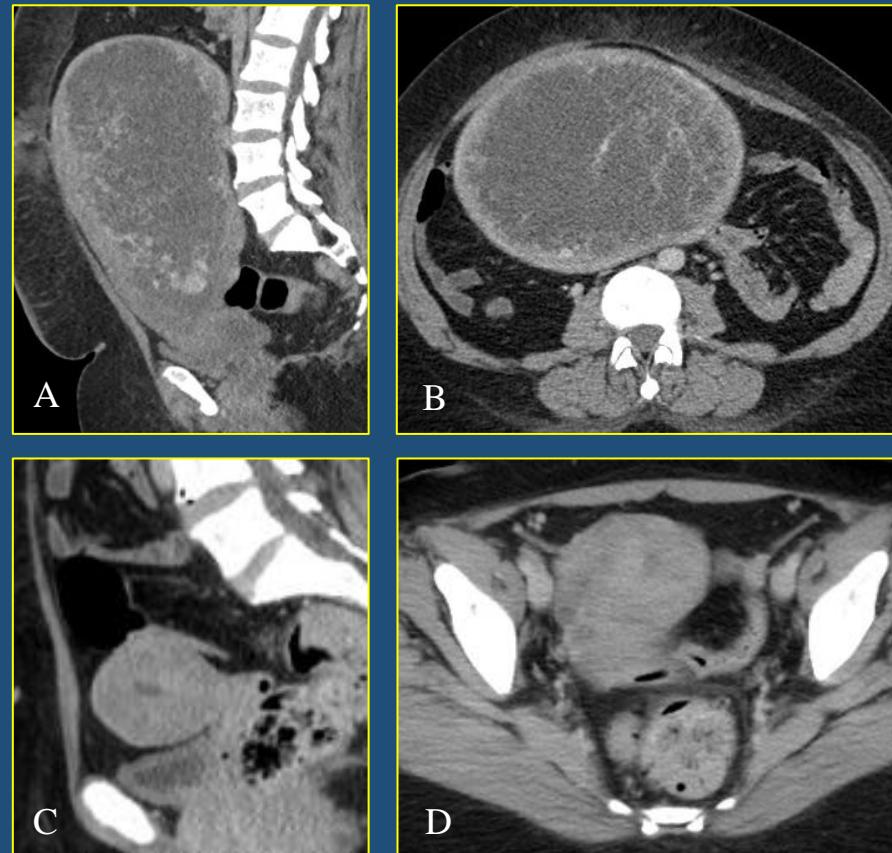
Human chorionic gonadotrophin (HCG) titer was over one million.

Abdominal CT showed a large hypervascular mass within the endometrial cavity with contrast extravasation. Angiography confirmed the diagnosis of a hypervascular uterine mass.

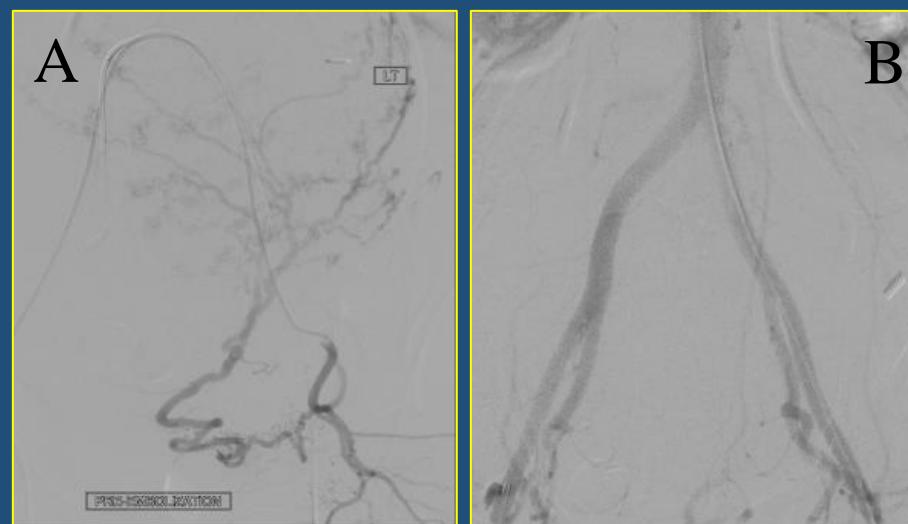
Successful bilateral uterine artery embolization was achieved utilizing embosphere particles (500-700 micron) and Gelfoam.

Uterine suction and curettage were performed on the same day. Perioperative bleeding was minimal. The patient was discharged with marked symptoms relief and no further bleeding or heavy menstruation. Pathology result was molar pregnancy consistent with complete mole.

No further surgical intervention was needed. HCG level returned to the normal limits after one year. Follow-up abdominal CT after 3 months showed significant decrease in the size of the pelvic mass.



Contrast enhanced CT images (A,B) pre-embolization showing the huge pelvic tumor (C,D) marked regression in the size of the tumor 3 months after embolization



Angiography images showing pelvic hypervascular mass (A) before embolization and (B) after embolization

## Discussion:

Gestational trophoblastic diseases include placental pathologies comprising fertilization abnormalities (benign and malignant forms). Due to their low incidence and heterogeneity, their diagnosis, management and treatment are not always optimal. Premalignant moles are usually treated by suction curettage while persistent and recurrent moles and malignant forms require systemic therapy with methotrexate or combination chemotherapy. These tumors are usually associated with heavy vaginal bleeding which is an emergency and has multiple therapy options. Since the introduction of the uterine artery embolization for the treatment of postpartum hemorrhage, it became one of the options for the management of the intractable gynecological bleeding.

## Conclusion:

Uterine artery embolization can play an important role as an adjunctive treatment of massive vaginal bleeding. It offers safe and supportive management for the surgical intervention. It may be used to help avoiding major surgical interventions, such as hysterectomy.

## REFERENCES:

1. Percutaneous embolization in the management of intractable vaginal bleeding. Mihmanli I, et al. 2001 Jan;264(4):211-4.
2. Management of massive hemorrhage in patients with gestational trophoblastic neoplasia by angiographic embolization: a safer alternative. Keepanasseril A, et al. 2011 May-Jun;56(5-6):235-40
3. Percutaneous transcatheter embolization for control of life-threatening pelvic hemorrhage from gestational trophoblastic disease. Pearl ML, et al Obstet Gynecol. 1992 Sep;80(3 Pt 2):571-4.
4. Transcatheter angiographic embolization for the control of massive pelvic hemorrhage due to gestational trophoblastic disease: a case series and review of the literature. Moodley M, et al 2003 Jan-Feb;13(1):94-7
5. Selective uterine artery embolization: A new therapeutic approach in a patient with low-risk gestational trophoblastic disease Carlini L, et al Am J Obstet Gynecol. 2006 Jul;195(1):314-5.

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