



UTERINE ARTERIOVENOUS VASCULAR MALFORMATION AFTER PARTIAL MOLAR PREGNANCY –A DIAGNOSTIC CHALLENGE

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ABSTRACT

Uterine arteriovenous malformation (UAVM) is an uncommon but life-threatening source of bleeding. Reported incidence of UAVM is 3.4–4.5%. AVM is an abnormal connection between uterine arteries and veins. Patients typically present with vaginal bleeding. Diagnosis will depend on clinical history, USG and MRI. The treatment of choice depends on the symptoms, age, desire of fertility, localization and size of the lesion. Uterine artery embolization is the first choice in symptomatic patients of reproductive age group. We report a case of AVM presenting after dilation and evacuation.

KEYWORDS

INTRODUCTION -

Uterine arteriovenous vascular malformations (UAVM) are rare and usually present in women of reproductive age. UAVM can be congenital, acquired and can be post procedural. When these occur in a pregnant patient or in the immediate postpartum period, clinical presentation mimics with retained products of conception (RPOC), postpartum endometritis, and gestational trophoblastic disease (GTD)¹. We present a case of a UAVM that presented with excessive vaginal bleeding one month after dilatation and curettage (D&C) of a molar pregnancy. The UAVM was diagnosed with ultrasound (US) and magnetic resonance imaging (MRI), and subsequently treated with transarterial embolization (TAE).

Case report-

We report a case of 25-year-old female who presented with complaints of heavy vaginal bleeding, abdominal pain for last 1 month after D&C. The patient's first pregnancy resulted in a spontaneous abortion 3 years ago. Four months prior to presentation, she was diagnosed with a complete molar pregnancy. She underwent a D&C for treatment. Now she presented with excessive vaginal bleeding for last one month. Her hemoglobin was 7 g/dl. Her beta-hCG was 1133mIU/ml. An US of the pelvis showed cystic structures within the uterus. On color Doppler, there was color flow within these anechoic cystic spaces with rapid arterial flow of up to 74 cm/s with a resistance index of 0.25. MRI of the pelvis demonstrated an enlarged uterus with several flow voids within the uterus, consistent with a high-flow arteriovenous malformation (AVM). The patient was referred for angiography and possible embolization.

DISCUSSION –

UAVMs are uncommon vascular lesions that often present as unexplained, intermittent, vaginal bleeding occurring with or without pelvic pain or dyspareunia². Acquired UAVMs often follows pregnancy or uterine trauma, such as D&C, pelvic surgery, endometrial and cervical carcinoma in situ, maternal diethylstilbestrol exposure, infection, RPOC, GTD, or choriocarcinoma. Reported incidence of UAVM is 3.4–4.5 %³. The diagnosis of UAVM is challenging given the rarity of the condition and the nonspecific US findings. The use of color Doppler with spectral analysis can characterize the gray-scale findings further. However, beta-hCG levels may be used to distinguish pregnancy-related conditions (GTD, RPOC, and abnormal placentation) from the diagnosis of a UAVM.

MRI, can aid in the prompt diagnosis of this condition Typical MR findings are a bulky uterus with absence of a defined mass and the presence of serpiginous and dilated vessels within myometrium or parametrium. Embolization is the preferred treatment for UAVMs.

REFERENCES

1. Alessandrino F, Di Silverio E, Moramarco LP. Uterine arteriovenous malformation. *Journal of ultrasound*. 2013 Mar 1;16(1):41-4.
2. Kwon JH, Kim GS. Obstetric iatrogenic arterial injuries of the uterus: diagnosis with US and treatment with transcatheter arterial embolization. *Radiographics*. 2002 Jan;22(1):35-46.
3. Grivell RM, Reid KM, Mellor A. Uterine arteriovenous malformations: a review of the current literature. *Obstetrical & gynecological survey*. 2005 Nov 1;60(11):761-7..

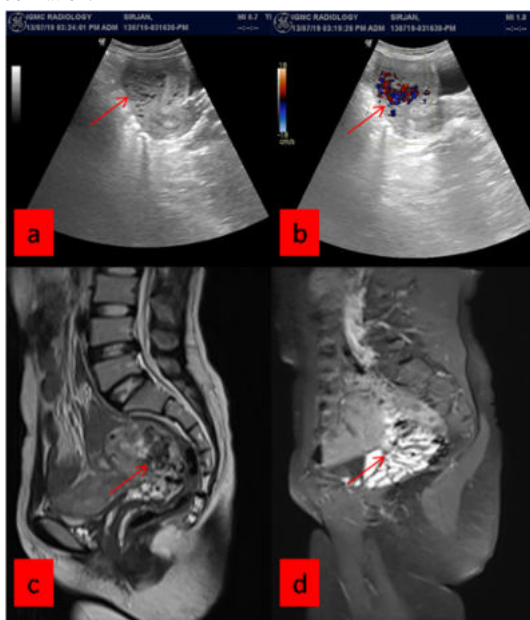


Fig 1 (a) USG showing cystic space (b) increased vascularity (c,d) MRI showing flow void and vascular congestion in pelvis.