

EP01.30

Recurrent uterine arteriovenous malformation: a diagnostic and therapeutic challenge unveiled by Doppler ultrasound

A Ghanem ; H Ouertani ; H Ben Ahmed ; O Zargouni ; D Chelli

Introduction

Uterine arteriovenous malformation (AVM) is a rare but potentially life-threatening vascular anomaly, often associated with previous uterine trauma, pregnancy-related events, or surgical interventions. Its diagnosis relies heavily on imaging, particularly Doppler ultrasound, which plays a key role in identifying its characteristic features. Recurrence after embolization is uncommon but presents significant clinical challenges

Case

We report the case of a 34-year-old woman, gravida 6 para 2, with a history of four previous induced abortions by aspiration.

She presented with severe abnormal uterine bleeding, and transvaginal Doppler ultrasound revealed a heterogeneous, hypoechoic lesion with multiple serpiginous anechoic structures, demonstrating high-velocity, low-resistance turbulent flow—findings consistent with a uterine AVM (Figure 1).

Pelvic angiography confirmed the diagnosis (Figure 2), and the patient underwent uterine artery embolization (Figure 3) with symptom resolution.

Six months later, she experienced recurrent heavy bleeding, and follow-up Doppler ultrasound showed persistent vascular channels with high-velocity shunting, confirming AVM recurrence. A second embolization was successfully performed, leading to clinical improvement.

Conclusion

This case highlights the importance of Doppler ultrasound in the diagnosis of uterine AVM, as well as the potential for recurrence despite initial successful embolization. Long-term monitoring is crucial in patients with a history of uterine AVM to ensure early detection and management of recurrence, thereby preventing severe hemorrhagic complications.

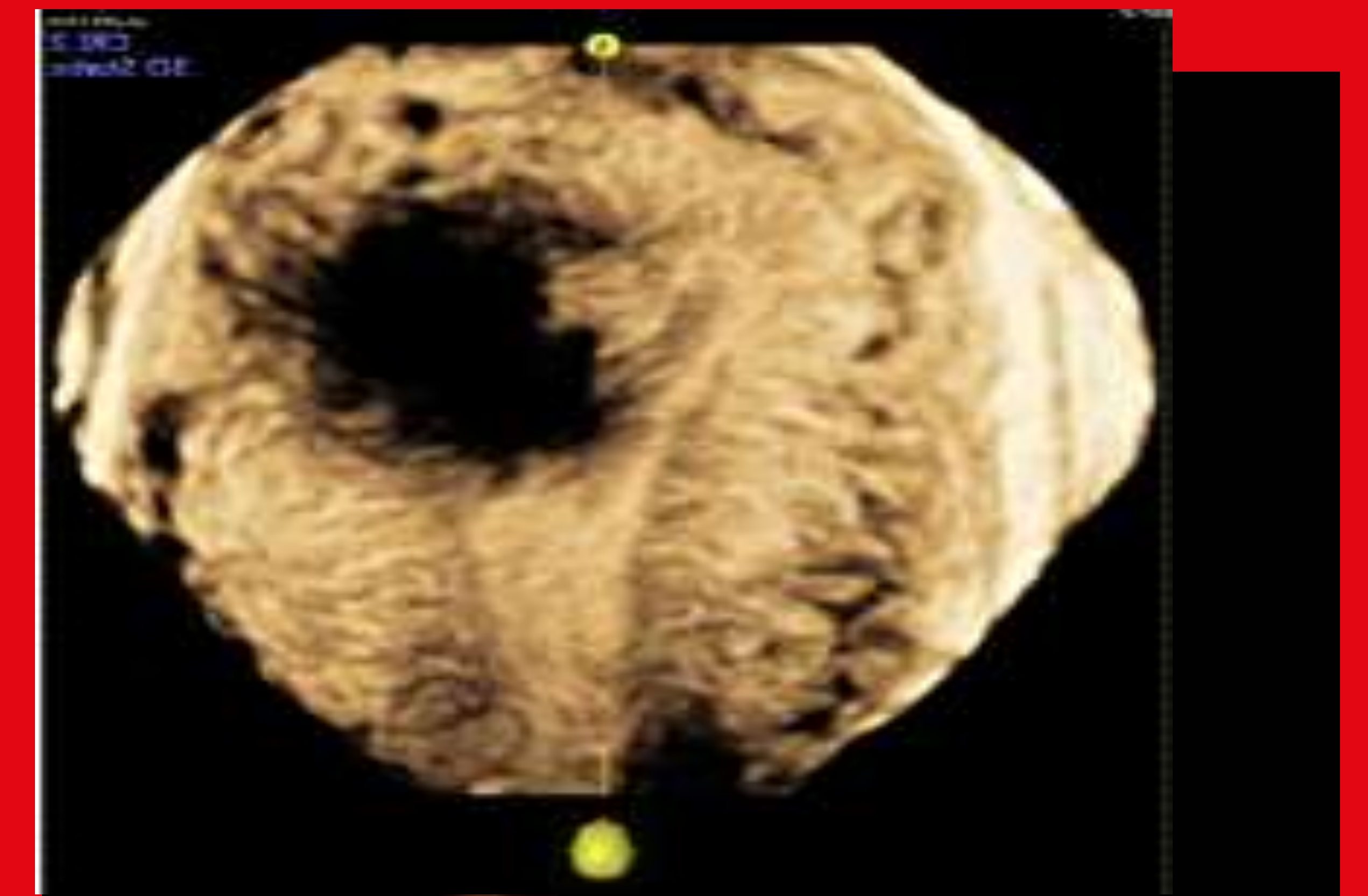


Figure 1. transvaginal 3 D ultrasound



Figure 2: Pelvic angiography

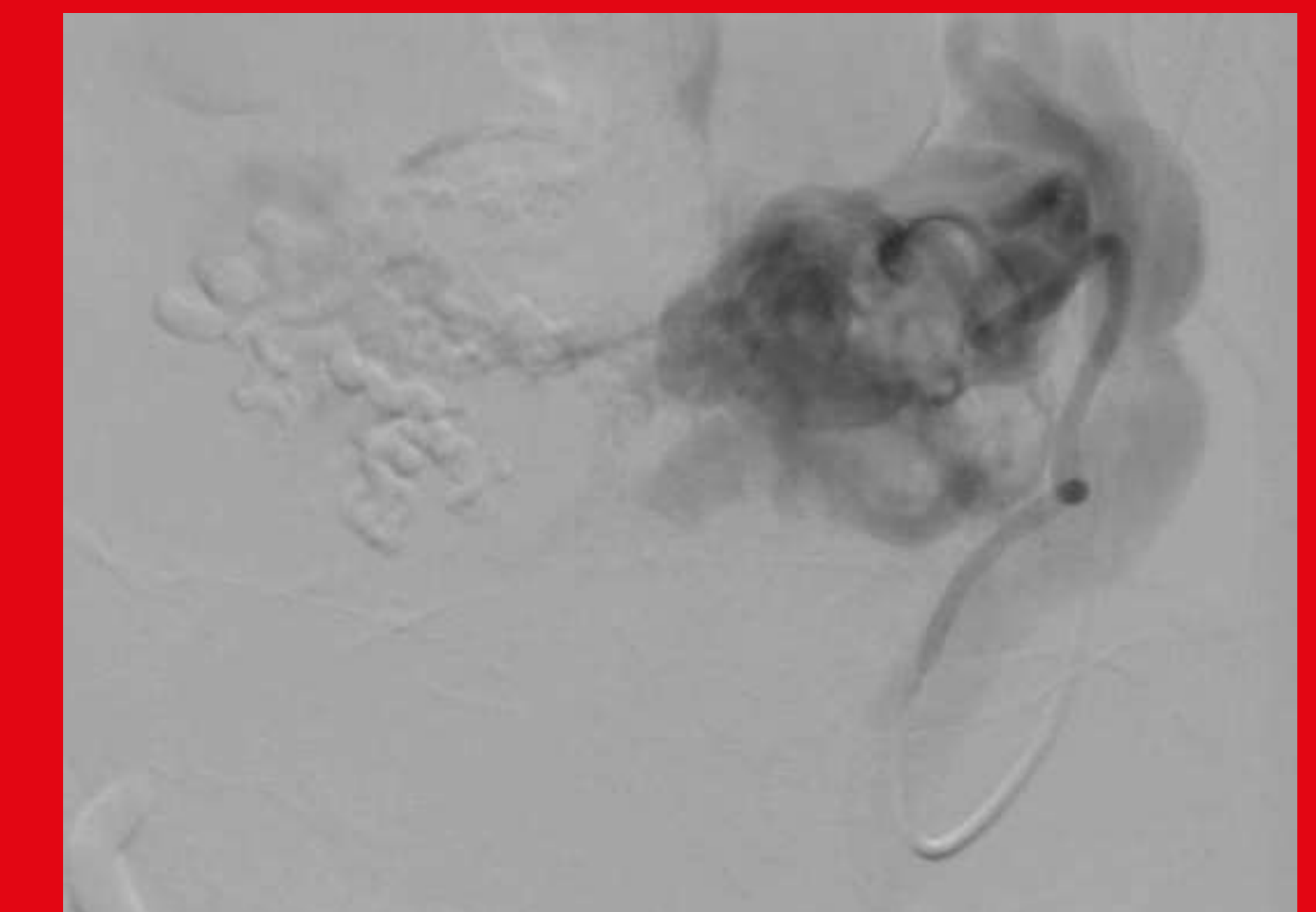


Figure 3: uterine artery embolization