

Vascularized Retained Product of Conception (RPOC) Mimicking Uterine Arteriovenous Malformation (AVM): Diagnosis and Management

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Abstract

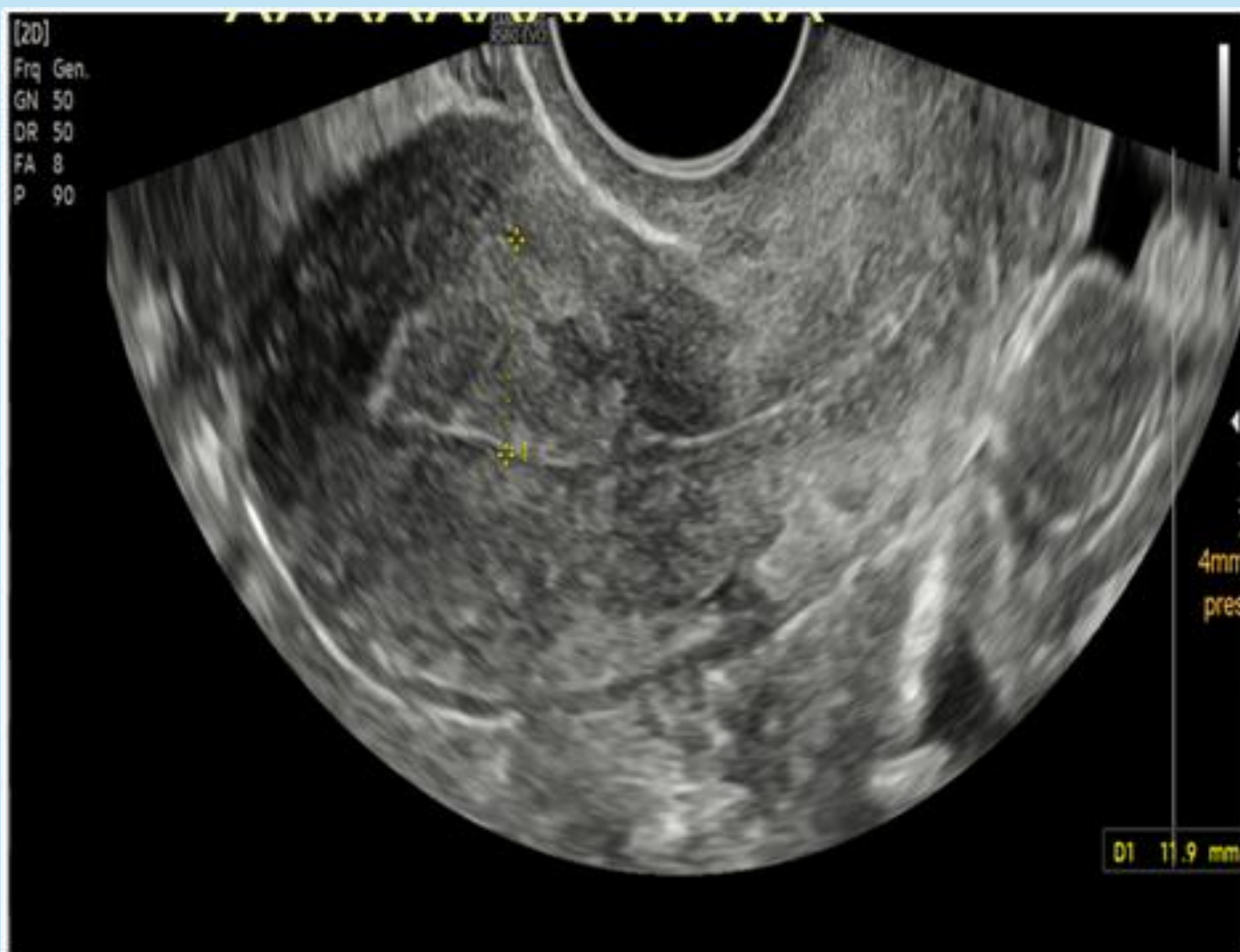
- An 18-year-old female presented with persistent abnormal uterine bleeding after surgical management (ERPC) for a missed miscarriage.
- Persistent symptoms and ultrasound findings initially suggested vascularized retained products of conception (RPOC) mimicking uterine Arteriovenous Malformation (AVM).
 - Definitive diagnosis was achieved via hysteroscopy and suction evacuation, with histopathology confirming RPOC.
- This case highlights challenges in differentiating vascularized RPOC from AVM in post-miscarriage bleeding.



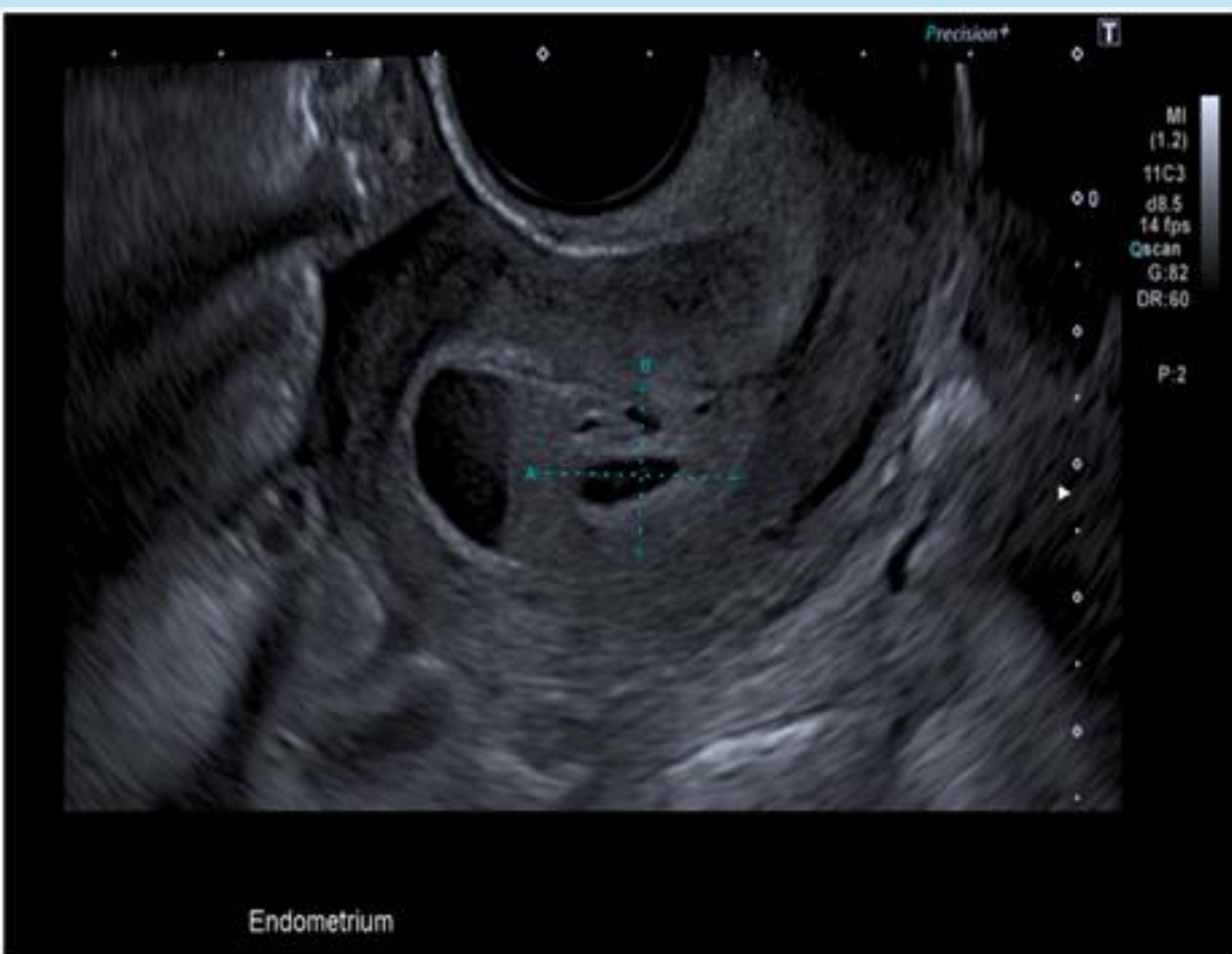
Scan to view Case Report



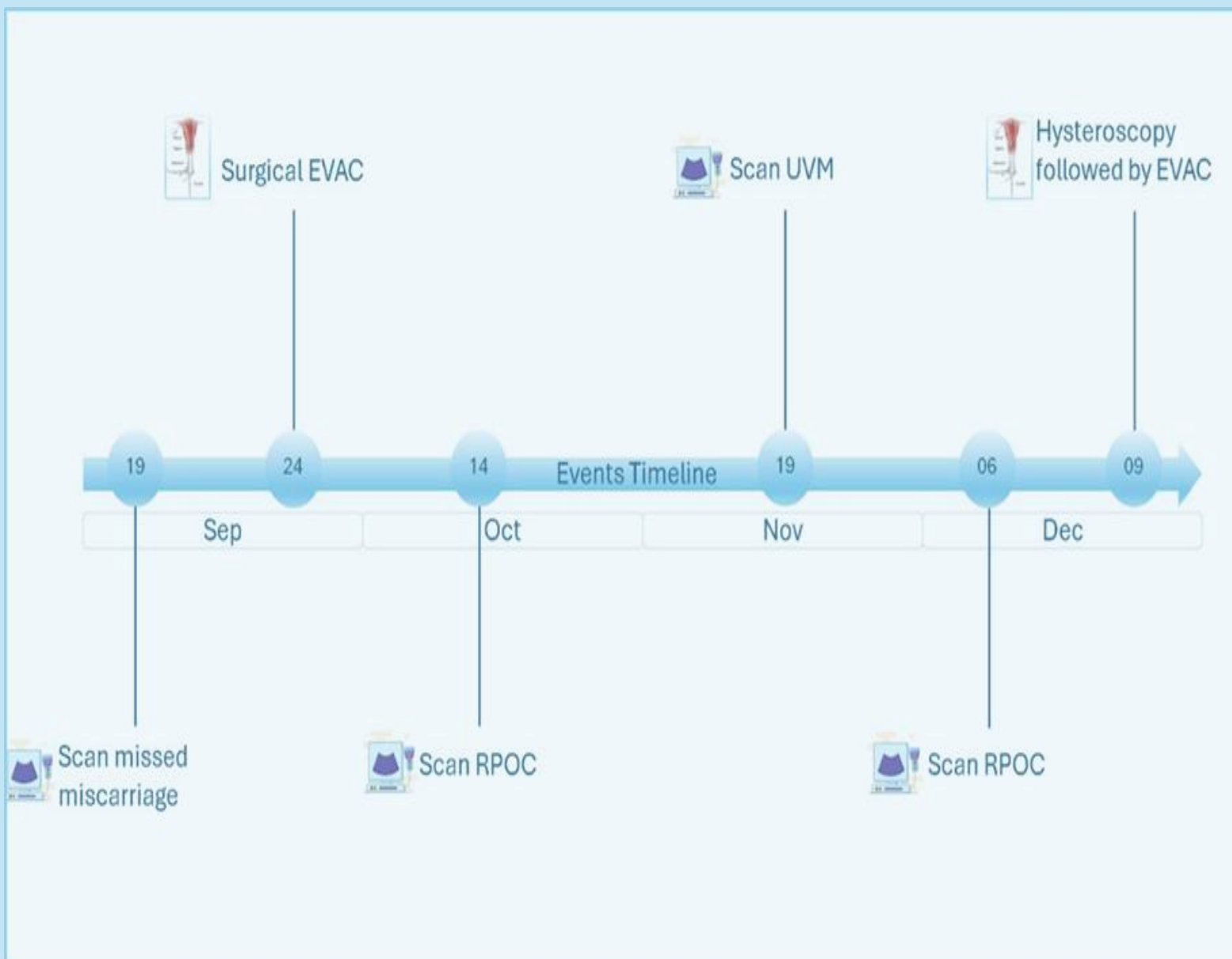
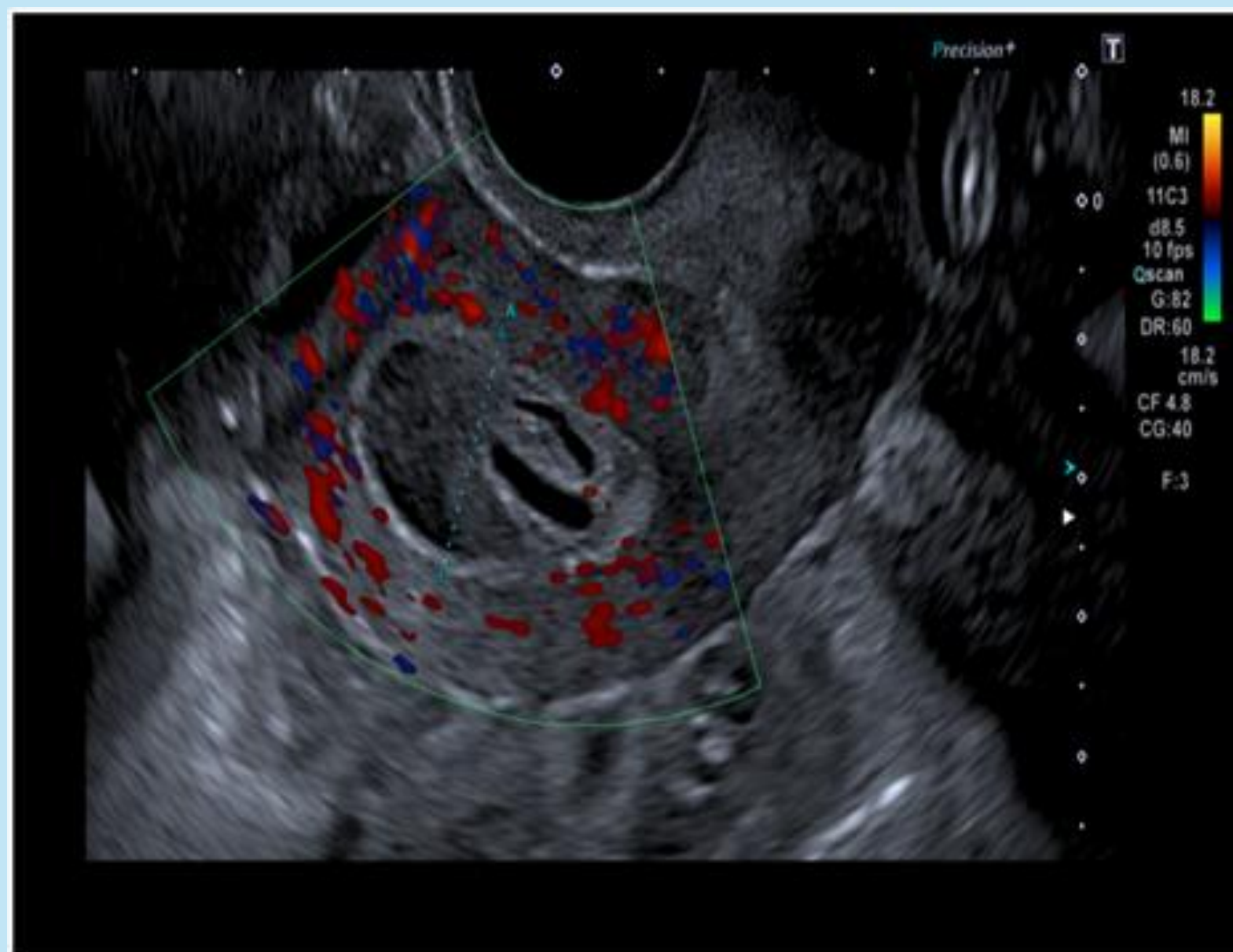
Vascularity (++), demonstrated with color Doppler



Vascularity and echogenicity in the anterior myometrium suggested uterine AVM



Vascularity and echogenicity in the anterior myometrium suggested uterine AVM



Timeline of Events

Introduction

- Retained Products of Conception (RPOC) are a common complication post-miscarriage or termination, presenting with abnormal uterine bleeding.
- RPOC can mimic uterine AVM due to overlapping clinical and imaging features, especially vascularity on Doppler ultrasound.
- Accurate differentiation is crucial for appropriate management.
- This report details the diagnostic and management challenges.

Case Presentation

- Initial Presentation:** 18-year-old female, missed miscarriage (8+5 weeks), underwent ERPC.
- Persistent Symptoms:** Intermittent vaginal bleeding for >1-month post-ERPC.
- Initial Ultrasound (Oct):** Thickened, vascularized endometrium (20.6 mm), suggestive of RPOC. Conservative management initially recommended. *(See Figure 1 L → R)*
- Recurrent Symptoms:** Re-presented with heavy bleeding and pain.
- Second Ultrasound (Nov):** Findings raised suspicion of uterine AVM due to increased myometrial vascularity. Hormonal therapy declined. *(See Figures 2 & 3)*
- Third Ultrasound (Dec):** Mixed echogenic lesions consistent with RPOC; previously suspected AVM not visualized. *(See Figures 4 & 5)*
- Definitive Management:** Hysteroscopy and suction evacuation performed. Histopathology confirmed RPOC (degenerate chorionic villi).
- Outcome:** No recurrence of symptoms post-procedure.

Discussion

- RPOC diagnosis can be challenging due to overlap with conditions like AVM.
- Transvaginal ultrasound (TVS) with Doppler is the first-line investigation, but vascularity can mimic AVM.
- Digital subtraction angiography is the gold standard for AVM, but histopathology remains indispensable for definitive diagnosis of RPOC, especially in equivocal cases.
- This case highlights potential AVM overdiagnosis, delaying RPOC treatment.
- A multidisciplinary approach and repeat imaging are crucial for persistent symptoms.
- Management differs: AVM may require hormonal therapy, embolization, or hysterectomy; RPOC is typically managed with surgical evacuation. Conservative management for RPOC is possible in stable cases with minimal bleeding.

Conclusion

- Thorough evaluation is needed for persistent post-miscarriage bleeding to rule out RPOC, AVM, infection, and GTN.
 - Diagnostic challenges, as seen in this case, can lead to AVM overdiagnosis and delayed RPOC management.

Accurate, timely diagnosis guided by clinical and imaging findings, alongside histopathology when needed, is crucial to avoid complications and improve outcomes.