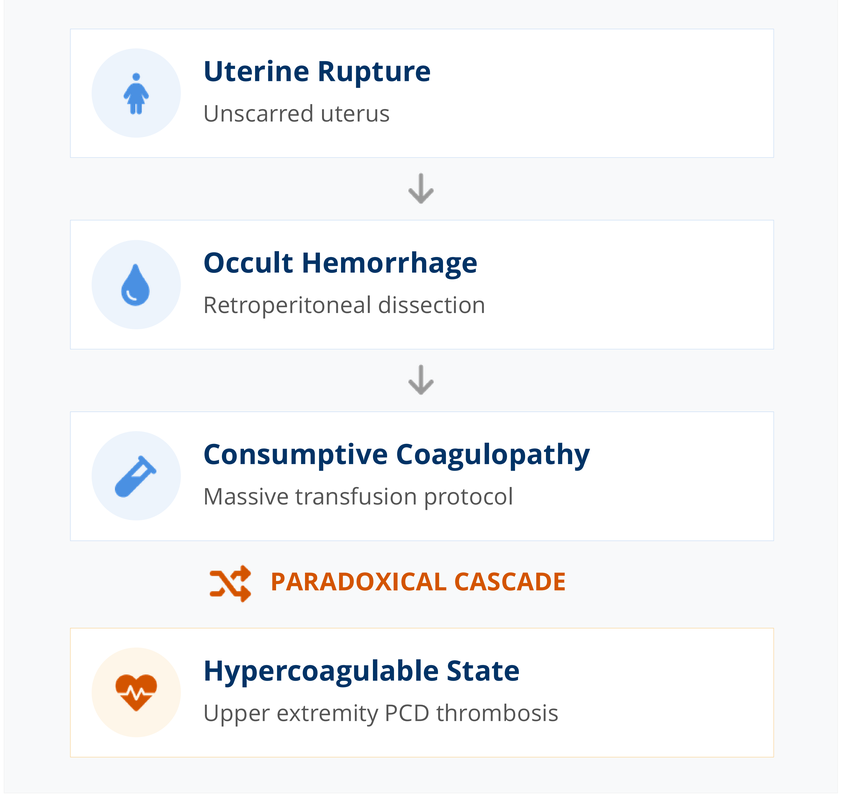
BACKGROUND: SPONTANEOUS UTERINE RUPTURE & OCCULT HEMORRHAGE

Francinni Mambrini, Andre Miller, Mariana Rego, Fernando Nani

Spontaneous rupture of unscarred uterus:
1 in 5,700–20,000 deliveries

- **Retroperitoneal hemorrhage dissection delays diagnosis** — ultrasound falsely negative
- **Consumptive coagulopathy → paradoxical hypercoagulability cascade** — rare but life-threatening
- **Upper extremity Phlegmasia Cerulea Dolens (PCD):** high amputation risk (>50% if untreated)
- **Clinical gap:** No prior reports of upper extremity PCD after obstetric massive transfusion protocol



CLINICAL COURSE: FROM SHOCK TO LIMB-THREATENING THROMBOSIS

3,500 mL

Isolated retroperitoneal hematoma (missed by U/S)

5,200 mL

Estimated blood loss requiring massive transfusion

18 hours

Post-op initiation of therapeutic enoxaparin

72 hours

Complete resolution of thrombosis

T0: Presentation

Sudden Collapse

35yo primigravida, 40+1 wks. Severe hypotension, tachycardia, profuse bleeding after epidural.

T1: Diagnostic Delay

Negative Ultrasound

No scar/trauma. Bleeding in retroperitoneum, not free fluid. Progressive shock.

T2: Intraoperative

Emergency Laparotomy

Spontaneous rupture confirmed. Hysterectomy, massive transfusion activated.

T3: POD +6 hours

Upper Extremity PCD

Sudden cyanosis, severe pain and edema in left arm. DVT in brachial/cephalic/basilic veins.

T4: POD +9 days

Resolution & Discharge

Anticoagulation started at 18h. Complete resolution in 72h; preserved limb function.

TEACHING POINTS: RECOGNITION & MANAGEMENT OF A CASCADE

Diagnostic Awareness

- Suspect uterine rupture **even without uterine scar**
- Retroperitoneal hemorrhage → **falsely negative ultrasound**
- Delay in diagnosis intensifies shock and coagulopathy

Hemostatic Cascade

- Prolonged shock + massive resuscitation activate **Virchow's triad**
- **Monitor all extremities** after massive transfusion protocol
- Aggressive IV access may contribute to thrombosis; consider site rotation

Critical Intervention

- **Early anticoagulation prevents amputation** in PCD
- Therapeutic heparin at **18h POD → complete resolution 72h**
- Do not delay anticoagulation awaiting coagulopathy normalization

Clinical Pearl

- Upper extremity PCD after obstetric MTP: **first reported case**
- Requires high suspicion and rapid Doppler imaging
- **Limb salvage depends on prompt recognition** and intervention

KEY MESSAGES

Suspect rupture even without scar

Retroperitoneal bleed → falsely negative U/S

Early anticoagulation = limb salvage

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