# Seizure to Hysterectomy: Suspected Atypical Presentation of Amniotic Fluid Embolism

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# Background

AFE is a rare but life-threatening obstetric emergency

Classic triad:  hypoxia + hypotension + coagulopathy

Entry of amniotic contents into maternal circulation →
(1) anaphylactoid reaction  (2) hemorrhagic phase

Atypical presentations: subclinical or incomplete triad

- Gradual or delayed onset hemodynamic collapse
- Severe coagulopathy with minimal initial signs
- Delayed or isolated neurological events

# Case

**Patient:**

- 38-year-old G5P3 at 41w5d presenting for elective repeat cesarean section
- Current pregnancy complicated by LGA fetus, polyhydramnios, malpresentation
- No history of pregnancy induced hypertension or evidence of PAS

**Intraoperative Events:**

- Dense adhesions, uterine window noted
- Shortly after delivery → self-limited seizure (BP 141/60)
- Placenta easily extracted, uterus closed with adequate tone and hemostasis
- Stable hemodynamics and oxygenation

**Postpartum Course:**

- Bleeding refractory to uterotonics, TXA, and JADA placement
- Labs notable for coagulopathy out of proportion to blood loss
- Returned to OR for emergent hysterectomy
- No further episodes of hypertension or seizure activity

# Teaching Points

- Seizure may be an early sign of AFE, occurring in 5-10% of cases
- Proposed mechanisms:
  - Cerebral hypoperfusion from pulmonary vasoconstriction and right heart failure
  - Microemboli, vasospasm, or direct neurotoxicity from amniotic fluid components
- Biphasic presentation can delay diagnosis
  - Isolated seizure with transient stability may mimic eclampsia
- Maintain suspicion for AFE in any peripartum seizure, especially when:
  - No signs of preeclampsia, stroke, or other clear neurologic cause
  - Unexplained coagulopathy or hemorrhage present
- Early recognition is critical for timely intervention