A Diagnostic Dilemma: Multi-System Collapse in Peripartum Cardiac Arrest

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Background:

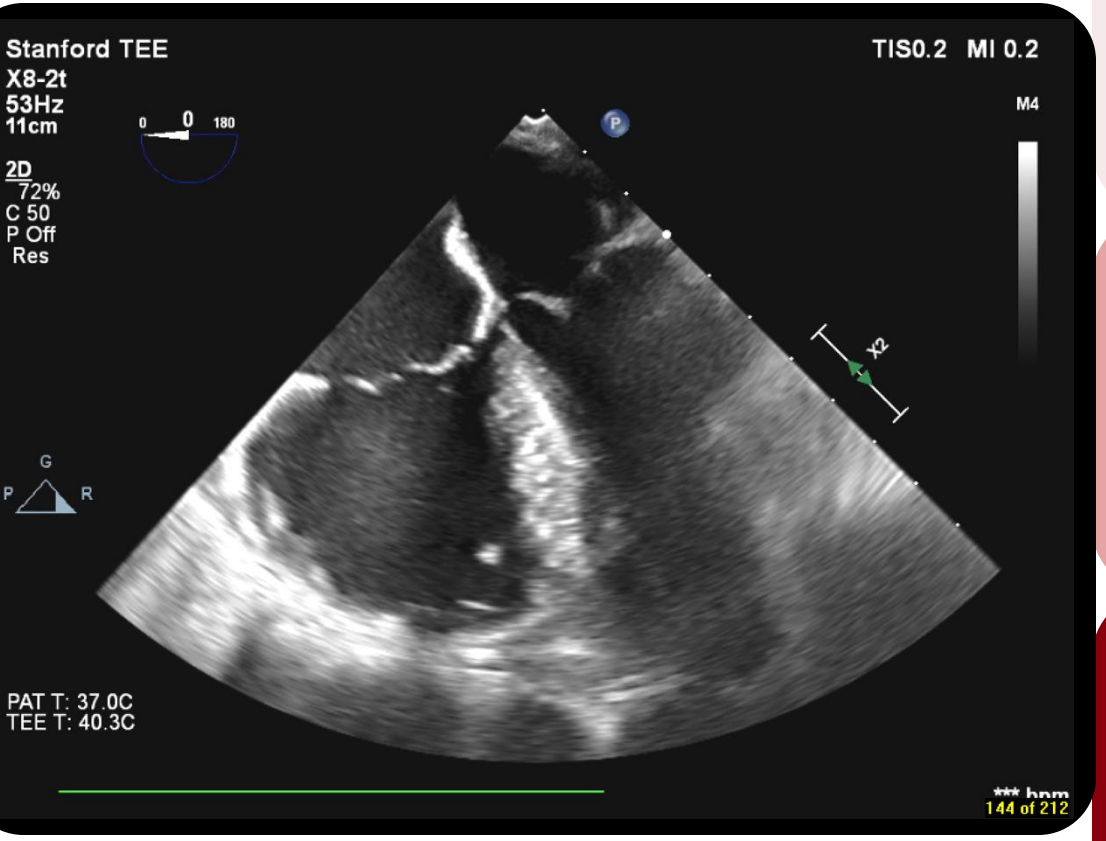
- Peripartum cardiac arrest complicates 1 in 12,000 deliveries
- Pregnancy-related changes can persist up to 8 weeks postpartum

- Multi-organ failure risk extends well beyond delivery
- Some cases remain without definitive diagnosis

Common Causes of Cardiac Arrest in US:

- Hemorrhage
- Heart failure
- Amniotic fluid embolism
- Sepsis

Clinical Course



- **Patient Profile:** 37-year-old G1P1 with gestational hypertension
- **Presentation:** New-onset pre-eclampsia 6 days postpartum
- **Treatment:** IV magnesium and oral antihypertensives

Deterioration: 30 hours after readmission

- Acute hypoxemia and progressive dyspnea
- Fulminant disseminated intravascular coagulation (unknown source)
- PEA arrest during intubation despite escalating oxygen therapy

- **Intervention:** ECPR with VA-ECMO within 25 minutes of arrest
- **Findings:** Severe RV dilation with dysfunction; normal LV function but underfilled
- **Outcome:** Developed cerebral edema and hypoxic brain injury; care withdrawn after 5 days

Teaching Points

- **Rapid Deterioration Risk:** Pre-eclampsia patients can worsen quickly despite appropriate therapy
- **Clinical Vigilance:** Consider atypical presentations of common obstetric emergencies

- **Rescue Strategies:** ECPR serves as potential rescue in maternal cardiac arrest
- **Diagnostic Challenges:** Case lacked definitive diagnosis despite close inpatient monitoring

Research Needs:

- Further investigation into delayed postpartum cardiovascular collapse
- Development of better predictive tools for high-risk patient identification

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