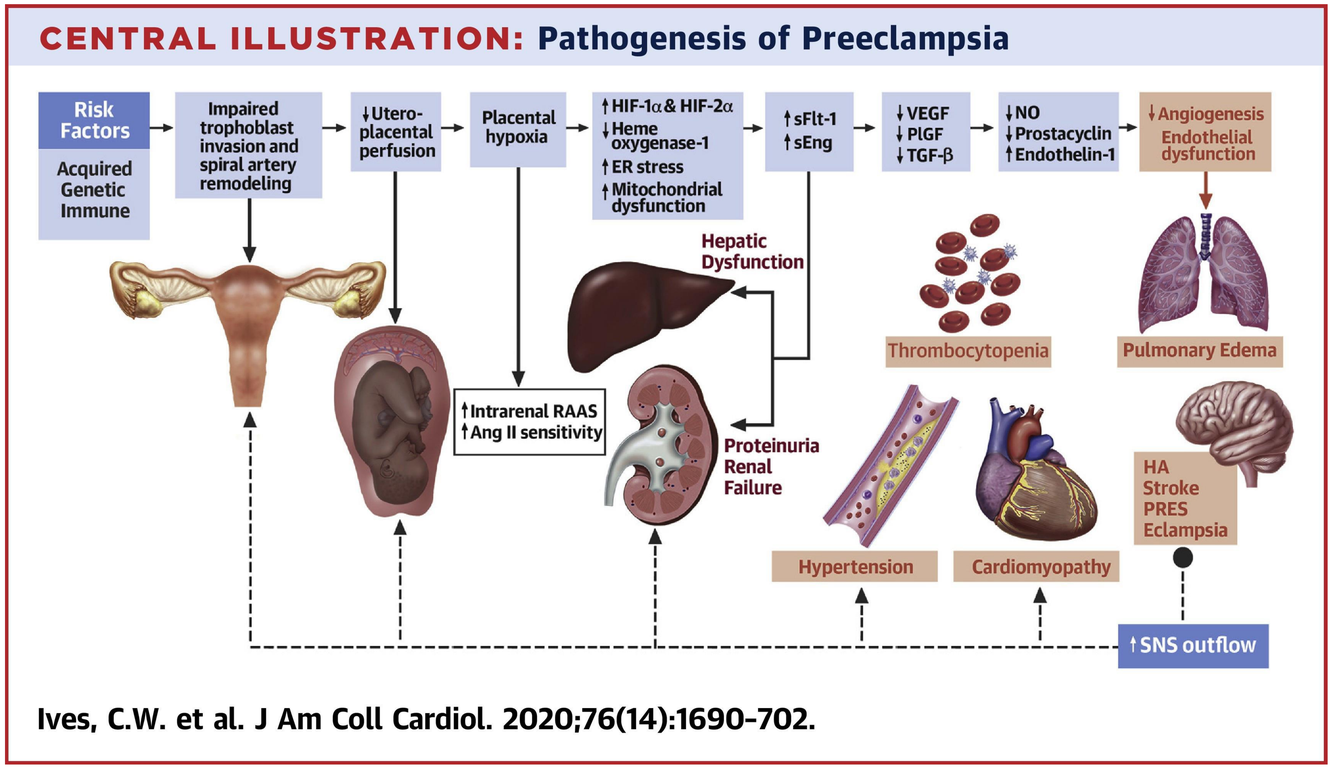
A Series of Unfortunate Events In Preeclampsia and HELLP Syndrome

Kyle Kellett, MD; Daniel Moroney, MD; William Hart, MD; Jennifer Gage, MD
University of Vermont Medical Center

Introduction

- Preeclampsia (PEC) →impaired uteroplacental perfusion + ↑↑ antiangiogenic factors[1]
- PEC can →**multi-organ disease** and/or HELLP syn with ↑mortality[1,3]
- Clinical care includes blood pressure (BP) control, ongoing surveillance/ treatment of end-organ dysfunction, magnesium (MgSO4) and delivery[2,3]



Ives, C.W. et al. J Am Coll Cardiol. 2020;76(14):1690-702.

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Case Presentation

35 y.o. G1P0, 39w1d spontaneous labor

- 148/83, UPCr 0.37, PLT = 80k, ↑LFTs, Cr 0.82
- PEC w/SF & HELLP; MgSO4 + plan for VD

Peripartum Events

- Early labor epidural with T10 sensory level
- Later: new-onset ↓BP + Cat II FHR Tracing
  - Phenylephrine w/o sensory block check
- 45 min later: ↓FHR, ↑Mg 10.6, ↑AST/ALT, Cr 1.4, Hgb 11.8, Plt 70 -> Emergent CD

Anesthesia

- Epidural dosed to T4 block
- ↓BP → ↑↑phenyl, QBL ~1L, UOP 70cc, ↓O2 sat

Postoperative course → SICU

- **POD#0:** ↓BP/oliguria, delayed txn, then ↑BP
- **POD#1: New RUQ pain/fever/↑HR/hypoxia**
  - 12.9x3.7x14.2cm perihepatic hematoma/ infarct/capsular rupture; 4u PRBC
  - Pulmonary edema → aggressive diuresis
  - Peak Cr 1.74, AST/ALT 5319/3479, PLT 60

Outcomes

- ↑ IV opioid for RUQ pain
- Lab-work normalized; Epidural removed
- POD#2 out of SICU, visiting NICU
- D/C'd POD#5 w/o serious morbidity

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Learning Points

1. PEC and HELLP syndrome can rapidly progress to life-threatening complications throughout peripartum period
2. Consider broad differentials for new-onset peripartum hypotension
   - Block height assessment is crucial; T10 level is unlikely to cause
3. Rx of hypotension with hypermagnesemia should include administration of calcium
4. Medically complex patients require ongoing surveillance, multidisciplinary conversation/huddles, +/- critical care to identify/manage evolving disease sequalae.

References
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3. Sibai BM. HELLP syndrome (hemolysis, elevated liver enzymes, low platelets). In: UpToDate, Coner RF (ed), Wolters Kluwer. Accessed Jan 24, 2026.