Suspected Anaphylaxis During Emergent Cesarean Section

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Intraoperative Hemodynamic Instability & Hypoxia During Cesarean Section:

• Requires prompt recognition and empiric treatment for maternal-fetal safety while refining differential diagnosis.

Key Differential Diagnoses:

- Anaphylaxis
- Air embolism
- Anaphylactoid Syndrome of Pregnancy (ASP)

Diagnostic Challenges:

• Overlapping clinical features complicate differentiation.



Case Presentation



Patient Presentation:

36 y/o G4P4 female, presented at 38 weeks in active labor with a breech presentation and complete cervical dilation.



Anesthetic:

General anesthesia with propofol & succinylcholine for emergent cesarean section.

10 min post-induction:

Progressive hypotension, hypoxemia, tachycardia, high peak airway pressures.



Diagnostics:

ABG: pH 7.22, PaCO2 39 mmHg, PaO₂ 49 mmHg, HCO₃⁻ 16.2 mEq/L).

Tryptase: 2.4 ng/mL (normal), no urticaria. Coagulation studies: normal

TEE: Hyperdynamic LV, normal RV, no embolism.



Treatment and Differential:

Anaphylaxis: Epinephrine (110 mcg total), albuterol, ketamine, steroids, famotidine, diphenhydramine

ASP: Atropine, ondansetron, ketorolac.

Pulmonary Embolism: ruled down with TEE



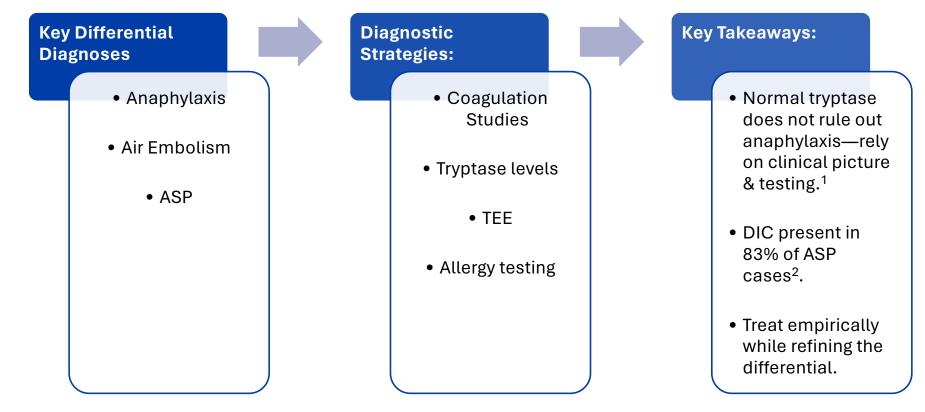
Outcome:

Stabilized after 30 min, extubated in the operating room, uncomplicated recovery. Allergy Testing:

Skin testing positive to succinylcholine & ondansetron.



Hemodynamic Instability & Hypoxia during Cesarean Section: Teaching Points



References

- 1. PMID: 38108678
- 2. PMID: 26987420

