# *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.

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# 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, $PaO_2$ 49 mmHg, $HCO_3^-$ 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.

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# Hemodynamic Instability & Hypoxia during Cesarean Section: Teaching Points

## Key Differential Diagnoses

- Anaphylaxis
- Air Embolism
- ASP

## Diagnostic Strategies:

- Coagulation Studies
- Tryptase levels
- TEE
- Allergy testing

## Key Takeaways:

- Normal tryptase does not rule out anaphylaxis—rely on clinical picture & testing.[1]
- DIC present in 83% of ASP cases[2].
- Treat empirically while refining the differential.


References

1. PMID: 38108678
2. PMID: 26987420


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