

# Anesthetic Management for a Parturient with Anaphylactic Transfusion Reaction: A Case Report

**Ransom Chin MD<sup>1</sup>, Narbeh Edjiu MD<sup>2</sup>, Vasilije Mijovic MD<sup>2</sup>, Gabriela Thalheimer<sup>2</sup>**

1. Department of Anesthesiology, University of Connecticut School of Medicine, Farmington, CT

2. Department of Anesthesiology, Integrated Anesthesia Associates, Hartford Hospital, Hartford, CT

**PI: Ransom Chin MD<sup>1</sup>**

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# Background

- **Anaphylaxis**
  - Acute, life-threatening allergic reaction involving multiple organs
  - Systemic in nature
- Symptoms range from skin flushing and urticaria to severe respiratory distress.<sup>1</sup>
- Common causes in anesthesia
  - Blood product transfusions
  - Specific allergies to medications, food, and insect stings



# Case Presentation

## Presentation

- A 24-year-old G1P0 female presented in labor at 40 weeks gestation
- Arrest of labor, requiring emergent CS
  - Infant delivered without complications
- Past medical history
  - ❖ Polycystic ovary syndrome
  - ❖ Sickle cell anemia
  - ❖ Migraines
  - ❖ BMI 51

## Complications

- Significant bleeding post placental delivery requiring transfusion of blood products
- Development of anaphylactic transfusion reaction resulting in hemodynamic instability



# Anesthesia Record

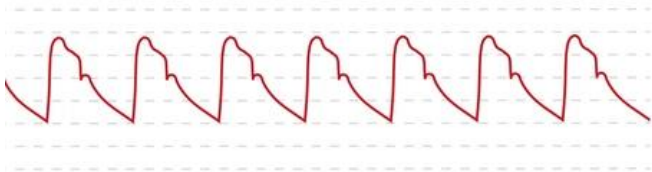
- Lumbar epidural catheter placed without complications
  - 20 ml of 2% Lidocaine and 100 mcg of Fentanyl
- Infant delivered via emergent CS without complication
- Significant bleeding noted post placental delivery, transfused for blood loss >3L
  - pRBC x 3, FFP x 1, Cryo x 1
- Anaphylactic transfusion reaction resulting in hemodynamic instability
  - SBP 40s
  - Severe pruritis
  - Shortness of breath
  - Facial edema
  - Diffuse urticaria



# Interventions

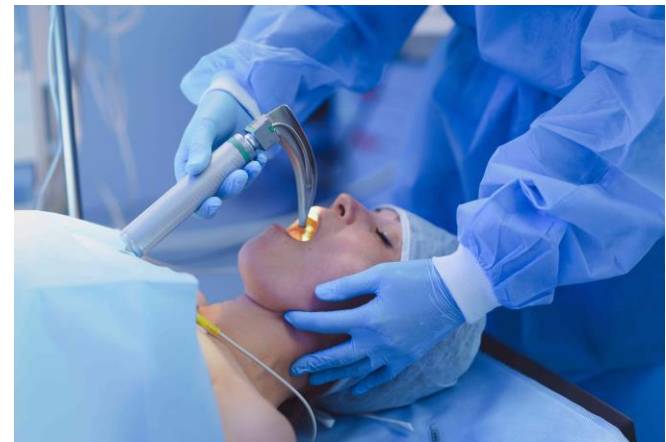
## Anaphylaxis

- Abrupt termination of blood products
- Pharmacologic treatment
  - Benadryl
  - Pepcid
  - Epinephrine
  - Ketorolac
  - Hydrocortisone
- Emergent intubation
- Arterial line placement
- Vasopressor support
- STAT labs



## Bleeding

- Intrauterine oxytocin
- Intramuscular methergine
- Intravenous tranexamic acid
- Jada device in the setting of persistent uterine atony



# Hospital Course

- Once stabilized, patient was transferred to ICU with mechanical ventilation
- Extubated POD #1
- Discharged home POD #4



# Important Takeaways

- **Managing anaphylaxis**
  - Importance of prompt recognition, hemodynamic support, and airway management
  - In obstetrics setting, parturients with difficult airways
- **Differential diagnoses** with similar presentations must also be considered.<sup>2</sup>
  - Amniotic fluid embolism, severe asthma attacks, and panic attacks
- **Increase awareness**
  - Associated multiorgan manifestations may lead to significant maternal morbidity and mortality

