



Etiology

Anaphylaxis is a severe systemic allergic reaction. It is a life-threatening Immunoglobulin E (IgE) mediated medical emergency requiring immediate treatment.

Anaphylaxis criteria include the following:

Exposure to a known or suspected allergen with a sudden onset of illness AND at least 1 of the following:

- Sudden respiratory signs and symptoms
- Sudden systolic BP less than 90 mmHg systolic or symptoms of end-organ dysfunction

Or

Exposure to a known or suspected allergen with a sudden onset of illness and BOTH of the following:

- Sudden skin or mucosal signs and symptoms
- Sudden gastrointestinal symptoms

Clinical Criteria for Diagnosing Anaphylaxis

Anaphylaxis is highly likely when either of the following criteria is fulfilled:

- Acute onset of an illness (minutes to several hours) after exposure to a known or suspected allergen and any of the following:
 - Altered level of consciousness
 - Airway edema
 - Systolic BP less than 90 mmHg or associated symptoms of end-organ dysfunction (e.g. hypotonia – collapse, syncope, incontinence)
 - Persistent gastrointestinal symptoms (e.g. cramping, abdominal pain, vomiting)
 - Dyspnea
 - Bronchospasm

The majority of anaphylactic reactions (approximately 80%) include skin symptoms, such as generalized hives, pruritis or flushing. Persistent gastrointestinal symptoms have been associated with adverse outcomes in anaphylactic reactions. Practitioners must be vigilant in identifying the rare patient whose only sign of anaphylaxis is hypotension.

Mild / Moderate Anaphylaxis

Signs and symptoms:

- Mild dyspnea or bronchospasm
- Urticaria
- Angioedema

- May have tachycardia but vital signs remain otherwise stable (no hypotension or clinical evidence of shock)

Severe Anaphylaxis

Signs and symptoms:

- Altered level of consciousness
- Respiratory failure (SpO₂ less than 85% refractory to supplemental oxygen)
- Airway compromise
- Systolic BP less than 90 mmHg

❖ When a severe anaphylaxis is suspected, be prepared for a sudden, rapid drop in blood pressure.

Interventions

1. Remove the allergen if possible
2. Stingers should be removed by scraping the skin with the dull side of trauma shears to avoid squeezing more venom into the site

Fluid Resuscitation

1. epiNEPHrine and IV/IO fluid boluses are the first-line treatments of hypotension in anaphylaxis
2. Titrate treatment of hypotension to a systolic BP greater than 90 mmHg
3. PCPs - **mandatory OLMC** for further direction if the patient remains hypotensive refractory to the administration of epiNEPHrine and 2 L of normal saline

Pharmacology

Patient Safety Considerations

•All of the medications in the Adult Anaphylaxis Protocol may be given concurrently based upon the patient's presentation