

Anaphylaxis Clinical Criteria

Anaphylaxis is likely when ONE of the following 3 clinical scenarios develops within minutes to ~2 hours

- 1) Possible allergen exposure with acute involvement of the skin, mucosal tissue, or both (e.g. generalized hives, pruritis, flushing, swollen lips/tongue/uvula) AND at least one of the following:
 - a) Respiratory compromise
 - b) Reduced BP or associated symptoms of end-organ dysfunction
 - c) Persistent GI symptoms (significant abdominal pain and/or repeated vomiting)
- 2) Involvement of two or more body systems to a likely allergen exposure
 - a) Skin-mucosal tissue
 - b) Respiratory compromise
 - c) Persistent GI symptoms
 - d) Reduced BP or associated symptoms of end-organ dysfunction
- 3) Reduced BP after exposure to a known allergen

AIM

- Ensure timely administration of IM epinephrine in patients with anaphylaxis or suspected anaphylaxis
- Standardized acute and discharge adjunct therapies to align with evidence-based practice

**Patient
presenting with
signs/criteria of
anaphylaxis**

- ESI Level 2 (critical)
- Notify Physician for Orders

MANAGEMENT

- Immediately administer IM epinephrine
- Monitor vital signs and support airway, breathing, and circulation
- Consider albuterol if needed for wheezing

IM EPINEPHRINE DOSING

- 1mg/mL concentration
- 0.01mg/kg up to 0.5mg in adolescents/patients \geq 50kg

Symptom Improvement AND Stable BP after Epinephrine

OBSERVE IN ED FOR 4 HOURS

- Consider cetirizine if needed for hives/swelling
- Order serum tryptase as soon as possible, within 3 hours of symptom onset, for patients without prior episode of anaphylaxis
- Monitor for recurrence of symptoms excluding hives/swelling

Persistent or Recurrent Severe Symptoms (Excluding Rash/Cutaneous) OR Hypotension

OR Hypotension

- Repeat IM epinephrine every 5 to 15 minutes as needed
- Place PIV
- Consider adjuvant IV medications
 - Diphenhydramine 1mg/kg (max 50mg)
 - Famotidine 0.5mg/kg (max 20mg)
 - Methylprednisolone 2mg/kg (max 60mg)
 - Normal Saline bolus 20mL/kg (max 1000mL)
- Consider epinephrine drip starting at 0.1mcg/kg/min for persistent hypotension

Recurrent symptoms
(excluding hives/swelling)

Discharge Criteria

Assess after 4 hours of observation

- All severe symptoms resolved (excluding hives/swelling)
- Required epinephrine x 1 dose only
- Parents comfortable, reliable, and have appropriate access to telephone and transportation
- Refill epi autoinjector for 2 devices
- Outpatient referral to Allergy/Immunology
- Antihistamines may be prescribed for skin relief if needed
- No evidence for steroids unless used for respiratory symptoms

Consider Prolonged Observation or Admission if Risk Factors for Severe Reaction

- Required > 1 dose epinephrine
- Progressive or persistent symptoms
- Hypotension
- Drug trigger
- History of severe asthma
- History of prior protracted episode or biphasic reaction

HOME EPINEPHRINE DOSING

- < 25kg: Prescribe EpiPen Jr 0.15mg
- \geq 25kg: Prescribe EpiPen 0.3mg

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References

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