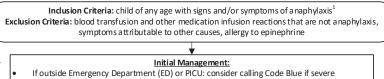
# **CLINICAL PATHWAY: Anaphylaxis**

THIS PATHWAY SERVES AS A GUIDE AND DOES NOT



#### <sup>2</sup>Hypotension:

Low systolic blood pressure for children is defined as:

- 1 month to 1 year: Less
- than 70 mmHg 1 to 10 years: Less than (70 mmHg + [2x age])
- 11 to 17 years: Less than 90 mmHg
- respiratory distress or hypotension<sup>2</sup>
- Place on continuous cardiorespiratory monitor and perform full set of vitals
- Immediately discontinue medications that may be causing an aphylaxis
- Rapid assessment and manage ABCs:
  - Administer Epinephrine 0.01 mg/kg of 1:1000 [1mg/ml] solution IM (max 0.5 mg)
  - Place patient in recumbent or supine position
  - If hypotensive<sup>2</sup>: Place PIV and administer normal saline bolus 20 ml/kg IV
  - If hypoxic: administer oxygen
- If respiratory failure: consider intubation
- Continue to check vital signs every 15 min, or more frequent if unstable

**MUST** document allergy and symptoms of allergy in oatient's chart

Stable vital signs and/or anaphylaxis resolved?

- Observe minimum of 2-4 hours from last epinephrine dose
- Vital signs every 30 min
- The following medications are NOT first line treatment for anaphylaxis and do NOT prevent biphasic anaphylaxis. However, these may be considered as secondary therapies to treat symptoms.
  - If urticaria: diphenhydramine 1 mg/kg/dose IV/PO q6hr

Any of the following?

Hx biphasic or severe reactions,

≥ 2 doses epinephrine required, progressive/persistent sxs,

Systemic steroids: prednisone or prednisolone 1-2 mg/kg/day (may choose alternative steroids as clinically indicated)

## Vital signs unstable and/or anaphylaxis unresolved:

- If outside Emergency Department (ED) or PICU: consider calling Code Blue if severe respiratory distress or hypotension <sup>2</sup>
- Administer up to 3 total doses of IM epinephrine q 5-15 min
- Place PIV and administer rapid NS bolus 20 ml/kg IV
- If hypotension<sup>2</sup>: give up to 3 boluses
- Check vital signs q 5 min

The following medications are NOT first line treatment for anaphylaxis and do NOT prevent biphasic anaphylaxis. However, these may be considered as secondary therapies to treat symptoms:

- Systemic steroids: prednisone or prednisolone 1-2 mg/kg/day (max 60 mg/day) (may choose alternative steroids as clinically indicated)
- If urticaria: diphenhydramine 1 mg/kg/dose IV/PO q6hr PRN
- If wheeze: consider albuterol 5 mg nebulized
- If stridor: consider racemic epinephrine
- If respiratory failure: consider intubation

reaction was to long acting medication, hx severe asthma/ current asthma flare, hypotension<sup>2</sup> or syncope, upper airway obstruction, young age ⊢NO YFS Discharge Criteria: Complete resolution of all serious symptoms (rash may persist), minimum of 2-4 hours from last

epinephrine, parental comfort with discharge and easy access to ED, epinephrine auto-injector physically available to family (if reaction to medication administered only in hospital setting, auto-injector may not be indicated)

#### Discharge meds:

Epinephrine auto-injector, diphenhydramine PRN

#### Discharge Instructions:

Epinephrine auto-injector training, avoid known allergens, consider referral to allergist, f/u with PCP in 1-2 days

- Admit to Medical-Surgical floors on Pediatric Hospital Medicine Service (GI, Nephrology or Heme-Onc will admit to their own service)
- Observe on continuous cardiorespiratory monitor Consider the following medications if needed as
  - per above indications: Diphenhydramine
  - Systemic steroids

Does patient meet all of the below? (if no to one criteria, must admit to PICU)

- Required <3 doses of epi?
- Stable vital signs? Normal mental status

-YES -NO Admit to PICU

### <sup>1</sup>Diagnostic Criteria for Anaphylaxis:

(must me et ONE of the following three criteria)

- 1. Acute onset (seconds to minutes) of skin and/or mucosal involvement (e.g. generalized hives, pruritus or flushing, swollen lips/tongue/uvula), AND respiratory compromise (e.g. dyspnea, wheeze/bronchospasm, stridor, hypoxemia) OR reduced blood pressure or associated symptoms of end-organ dysfunction (e.g. hypotonia, syncope, incontinence)
- 2. TWO OR MORE OF THE FOLLOWING that occur rapidly after exposure to a LIKELY allergen for that patient (seconds to minutes):
  - A. Skin-mucosal involvement (e.g. generalized hives, pruritus or flushing, swollen lips/tongue/uvula)
  - B. Respiratory compromise (e.g. dyspnea, wheeze/bronchospasm, stridor, hypoxemia)
  - C. Reduced blood pressure or associated symptoms (e.g. hypotonia, syncope, incontinence)
  - D. Persistent gastrointestinal symptoms (e.g. crampy abdominal pain, vomiting, diarrhea)
- 3. Reduced blood pressure after exposure to a KNOWN allergen for that patient (seconds to minutes): A. Infants and children – Low systolic blood pressure (age-specific) or greater than 30% decrease in systolic blood pressure from baseline
  - B. Adults Systolic BP of less than 90 mmHg or greater than 30% decrease from that person's baseline



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