UNMH Pediatric Anaphylaxis Pathway

Anaphylaxis Triage Screening Tool[2]
(Anaphylaxis highly likely if any ONE of the following 3 criteria are fulfilled)
Use Clinical Judgement

1. Acute onset of illness with skin/mucosal symptoms **AND** respiratory symptoms OR hypotension/syncope
2. Rapid onset **2 or more** symptoms after exposure to **likely** allergen for patient (skin/mucosal, respiratory, GI, hypotension/syncope)
3. Hypotension after exposure to **known** allergen for patient

Positive=MD/RN SWARM

Remove trigger exposure
IMMEDIATE IM EPINEPHRINE
100% oxygen via NRB
Position patient appropriately
Cardiac monitor
Consider IV/IO access (hold blood)

Epinephrine Dosing 1:1000 (1mg/mL):
- ❑ < 7.5kg: 0.01mg/kg
- ❑ 7.5 to 24kg: 0.15mg
- ❑ ≥25: 0.3mg

IM mid-anterolateral thigh
Use anaphylaxis care set

Improved after 1 dose of IM epinephrine

Yes

Monitor 4-6 hours
Consider adjunct medications

If well-appearing after 4-6 hours→
Discharge home
Epinephrine autoinjector prescription and teaching
Anaphylaxis action plan
Ad hoc referral to pediatric allergy
Patient support resources

No

Repeat IM epinephrine q 5-15 mins prn (up to 3 doses)
Consider NS bolus(es) 20 ml/kg
If wheezing→ albuterol neb(s)
If stridor→ racemic epinephrine neb(s)
Consider adjunct medications

If improved→
Admit to GPU or PICU

If refractory anaphylaxis→
Start epinephrine infusion
Admit to PICU

Medication Dosing for Anaphylaxis

Epinephrine infusion: (64mcg/mL), 0.03 mcg/kg/min, IV
(0.03 to 1 mcg/kg/min IV infusion, titrate per protocol)

Nebulized Medications:
Racemic epinephrine 2.25% solution, 0.5mL, nebulized
Albuterol 5mg, nebulized

Adjunct Medications:
Diphenhydramine 1.25mg/kg, IV (max 50mg)
Diphenhydramine 1.25mg/kg, by mouth (max 50mg)
Famotidine 0.5mg/kg, IV (max 20 mg)
Famotidine 0.5mg/kg, by mouth (max 20mg)
Methylprednisolone 2mg/kg, IV (max 60mg)
Dexamethasone 0.6mg/kg, by mouth (max 10mg)

Remove Trigger Exposure

Discontinue IV/oral medications
Wash skin (face/hands)

Patient Positioning in Anaphylaxis

Place patient **SUPINE**
If respiratory distress → upright
If active emesis → left lateral decubitus
AVOID RAPIDLY MOVING PATIENT UPRIGHT

Signs and Symptoms of Anaphylaxis[2]

Skin/Mucosal: flushing, itching, urticaria, angioedema, periorbital erythema/edema, conjunctival erythema/tearing, swelling of lips/tongue/uvula
Respiratory: nasal itching/congestion/rhinorrhea/sneezing; throat itching/tightness, dysphonia, hoarseness, stridor, cough; tachypnea, shortness of breath, chest tightness, wheezing, cyanosis, respiratory arrest
GI: abdominal pain, nausea, vomiting, diarrhea, dysphagia
CV: chest pain, tachycardia, bradycardia, other arrythmias, palpitations, hypotension, feeling faint/syncope, incontinence, shock, cardiac arrest
CNS: aura of impending doom, uneasiness/sudden behavioral change, throbbing headache, altered mental status, dizziness, confusion, tunnel vision

Anaphylaxis Pathway Goals

Patients with anaphylaxis will receive :

- IM epinephrine within 10 minutes of ED arrival
- New-onset anaphylaxis will be discharged with epinephrine autoinjector prescription
- New-onset anaphylaxis will be discharged with an anaphylaxis action plan
- New-onset anaphylaxis will be referred to pediatric allergy

References

1. Lieberman Phillip et al. Anaphylaxis – a practice parameter update 2015. Ann Allergy Asthma Immunol. 2015;115:341-384.
2. Simons F. Estelle R, et al. World Allergy Organization guidelines for the assessment and management of anaphylaxis. WAO Journal. 2011; 4:13-37.
3. Campbell RL, et al. Emergency department diagnosis and treatment of anaphylaxis: a practice parameter. Ann Allergy Asthma Immunol. 2014;113:599-608.