Treatment Protocols

ANAPHYLAXIS /ALLERGIC REACTION - Pediatric

Policy/Procedure/Protocol Manual

Date: 07/01/2023

Policy #9040P

Stable

Blood pressure appropriate for age

Unstable

Blood pressure low for age, and/or signs of poor perfusion or airway compromise

Pediatric BLS Standing Orders

- Universal Patient Protocol
- Ensure patent airway
- Give oxygen and/or ventilate per **Airway Policy**
- Continuous pulse oximetry, blood pressure monitoring prn
- Assist ventilations with Bag Valve Mask (BVM) when airway is compromised
- Remove allergen if known/possible

For respiratory distress, chest pain, lightheadedness, or more than two body systems are involved in suspected anaphylaxis or allergic reaction:

- Administer epinephrine auto-injector to lateral thigh or lateral upper extremity:
 - o Adult dose: 0.3 mg IM (> 30 kg or 66 lbs)
 - o Child/Infant dose: 0.15 mg IM (15-30 kg or 33-66 lbs)
 - MR q5min as anaphylaxis symptoms persist

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Pediatric LALS Standing Order Protocol

- Establish IV as needed
- Capnography

- Establish IV
- Capnography

ANAPHYLAXIS

- Epinephrine (1:1,000) IM weight based
- 10-20 mL/kg NS IV bolus; titrated to ageappropriate systolic BP MR as anaphylaxis symptoms persist

RESPIRATORY INVOLVEMENT

 Albuterol - weight based via nebulizer x 3 SO

PERSISTENT ANAPHYLAXIS

Epinephrine (1:1,000) per weight-based dosing IM, **MR q5min as anaphylaxis** symptoms persist

Pediatric ALS Standing Order Protocol

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- Monitor/EKG prn
- Establish IV/IO prn
- Capnography

<u>ALLERGIC REACTION</u> (Rash or urticaria, no other body systems involved)

Diphenhydramine – dosing per chart slow IV/IM/IO

- Monitor/EKG
- IV/IO
- Capnography

ANAPHYLAXIS

- Epinephrine should be prioritized <u>before</u> diphenhydramine or IV fluids for anaphylaxis or airway compromise.
- Epinephrine (1:1,000) IM weight based dosing, MR q5min as anaphylaxis symptoms persist
- Diphenhydramine per dosing chart slow IV/IM/IO
- 10-20 mL/kg NS IV bolus; titrated to ageappropriate systolic BP MR x1 q5min as anaphylaxis symptoms persist

RESPIRATORY INVOLVEMENT

- Albuterol weight-based via nebulizer x 3 SO
- Ipratropium per dosing chart added to first dose of albuterol via nebulizer

Pediatric Base Hospital Orders

- BHP Push dose epinephrine (1:10,000)
- BH Repeat albuterol

Notes

- Anaphylaxis is a systemic hypersensitivity response to an allergen. Untreated, anaphylaxis is deadly.
- Anaphylaxis is when two body systems appear to be involved in an allergic reaction. These include:
 - o Skin changes, itching or redness
 - o Nausea, vomiting or abdominal pain
 - o Respiratory distress including wheezing, tachypnea or airway constriction
 - o Significant acute edema or swelling
 - o Swelling of lips, tongue, uvula, or airway
- Treat as anaphylaxis with airway swelling or respiratory compromise, even when this is the "only" body system involved.
- Typically repeat epinephrine dosing until airway or respiratory symptoms have improved.
- Pediatric patients often present with abdominal pain, nausea or vomiting as their presenting anaphylaxis symptoms, along with another body system.
- If a pediatric patient is adult sized, or greater than 30 kg, use the 0.3 mg EpiPen dosing, if unsure of weight, use the higher dose.
- Push-dose epinephrine mixing instructions

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- 1. Remove 1 mL normal saline (NS) from the 10 mL NS syringe
- 2. Add 1 mL of epinephrine 1:10,000 (0.1 mg/mL) to 9 mL NS syringe

The mixture now has 10 mL of epinephrine at 0.01 mg/mL (10 mcg/mL) concentration

APPROVED:

Signature on File
Katherine Staats, M.D. FACEP
EMS Medical Director