Pediatric Allergic Reaction



History

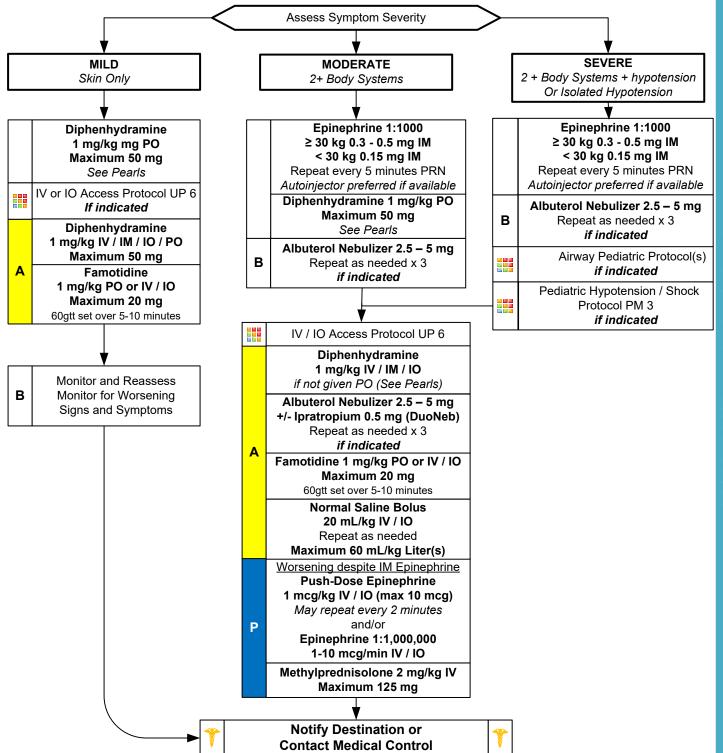
- Onset and location
- Insect sting or bite
- * Food allergy / exposure
- Medication allergy / exposure
- ★ New clothing, soap, detergent
- Past medical history / reactions
- Medication history

Signs and Symptoms

- Itching or hives
- Coughing / wheezing or respiratory distress
- * Chest or throat constriction
- * Difficulty swallowing
- * Hypotension or shock
- Edema

Differential

- Urticaria (rash only)
- Anaphylaxis (systemic effect)
- * Shock (vascular effect)
- Angioedema (drug induced)
- Aspiration / Airway obstruction
- * Vasovagal event
- * Asthma / COPD / CHF



Pediatric Medical Protocol Section

Pediatric Allergic Reaction



Pearls

- Recommended Exam: Mental Status, Skin, Heart, Lungs
- Anaphylaxis is an acute and potentially lethal multisystem allergic reaction.
- **Epinephrine administration:**

Drug of choice and the FIRST drug that should be administered in acute anaphylaxis (Moderate/Severe Symptoms.) IM Epinephrine should be administered in priority before or during attempts at IV or IO access.

Diphenhydramine and steroid administration:

Diphenhydramine/steroids have no proven utility in Moderate/Severe anaphylaxis.

Diphenhydramine/steroids should NOT delay repeated Epinephrine administration.

In Moderate and Severe anaphylaxis Diphenhydramine may decrease mental status.

Diphenhydramine should NOT be given to a patient with decreased mental status and/or a hypotensive patient as this may cause nausea and / or vomiting.

- Anaphylaxis unresponsive to repeat doses of IM epinephrine may require IV epinephrine administration by IV push or epinephrine infusion. Contact Medical Control for appropriate dosing.
- **Symptom Severity Classification:**

Mild symptoms:

Flushing, hives, itching, erythema with normal blood pressure and perfusion.

Flushing, hives, itching, erythema plus respiratory (wheezing, dyspnea, hypoxia) or gastrointestinal symptoms (nausea, vomiting, abdominal pain) with normal blood pressure and perfusion.

Severe symptoms:

Flushing, hives, itching, erythema plus respiratory (wheezing, dyspnea, hypoxia) or gastrointestinal symptoms (nausea, vomiting, abdominal pain) with hypotension and poor perfusion.

- Allergic reactions may occur with only respiratory and gastrointestinal symptoms and have no rash / skin involvement.
- Angioedema is seen in moderate to severe reactions and is swelling involving the face, lips or airway structures. This can also be seen in patients taking blood pressure medications like Prinivil / Zestril (lisinopril)-typically end in -il.
- Hereditary Angioedema involves swelling of the face, lips, airway structures, extremities, and may cause moderate to severe abdominal pain. Some patients are prescribed specific medications to aid in reversal of swelling. Paramedic may assist or administer this medication per patient/ package instructions.
 Fluids and Medication titrated to maintain a SBP >70 + (age in years x 2) mmHg.
- Patients with moderate and severe reactions should receive a 12-Lead ÉCG and should be continually monitored, but this should NOT delay administration of epinephrine.
- EMR/ EMT:

The use of Epinephrine IM is limited to the treatment of anaphylaxis and may be given only by autoinjector, unless manual draw-up is approved by the Agency Medical Director and the NC office of EMS.

Administration of diphenhydramine is limited to the oral route only.

- EMT administration of beta-agonist is limited to only patients currently prescribed the medication, unless approved by the Agency Medical Director and the NC office of EMS.
- The shorter the onset from exposure to symptoms the more severe the reaction.