



Allergic reactions – anaphylaxis

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Some terms

- Allergic reaction
 - Exaggerated immune system response to an allergen
- Allergen
 - The *thing* that causes an immune response
- Anaphylaxis
 - Severe **systemic** life threatening immune response to an allergen



Some causes

- **Insects**
 - Honey bee sting
- **Foods**
 - Nuts, seafood, milk
- **Plants**
 - Poison ivy
- **Animals**
 - Animal dander
- **Medications**
 - **Penicillin, Sulfa**
- **Others**
 - Soap, dust, chemicals, **latex**



Anaphylaxis S/S -- Skin

- Itching
- Hives
- Erythema
- Periorbital edema
- **Swollen lips/tongue**



Anaphylaxis S/S -- respiratory

- Chest/throat tightness
- Cough
- Tachypnea
- Muffled voice
- Wheezing
- stridor



Anaphylaxis S/S -- cardiac

- Tachycardia
- Hypotension
- **Rapid onset, rapid progression**
- **“cardiovascular collapse”**
- **Severe “relative hypovolemia”**



Some important facts

- Cannot occur on first exposure
- **Reactions tend to worsen with each exposure**
- **Onset may be rapid or delayed**
- **Must educate patient and family as to the severity of anaphylaxis**



Patient assessment

- ABCs
- Focused SAMPLE history
 - History of allergies?
 - Suspected allergen
 - How was the patient exposed
 - Ingestion, injection
 - Signs and symptoms
 - **Progression of S/S**
 - **Interventions – treatments attempted**
- **Vital signs repeated frequently**



Anaphylaxis -- treatment

- **ABCs**
 - Suction
 - O₂
- Determine history of anaphylaxis and/or recent exposure to allergen
- If both cardiac and respiratory status are normal
 - Transport
 - Frequent V/S – monitor closely for changes



Anaphylaxis – treatment (cont'd)

- If **either** cardiac or respiratory status is abnormal:
 - Prescribed EpiPen?
 - Has it? **Assist** patient in taking it
 - Does not have it/expired? **Administer** EpiPen
 - **EpiPen not prescribed?**
 - Contact medical control for authorization to administer EpiPen
 - Contact medical control for authorization for a second dose PRN
 - Rapid transport
 - Frequent V/S; monitor LOC
 - → **Anticipate cardiac arrest; return of anaphylaxis**