Allergic Reaction - Anaphylaxis

Adult Medical

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Austin County EMS Protocol & Guideline	
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Overview: Allergic reactions can be a direct threat to the patient's life. Anticipation of the severity is based on the time of onset and trending the progression of symptoms. This is key in identifying the appropriate therapy and preventing a crisis.

Definition: Allergic Reaction typically present with itching, swelling, urticaria, wheezing, and hypotension. These symptoms can be isolated or systemic and in any combination or single symptom presentation.

- **Minor Reaction** is defined as a localized, slow progressing reaction which has not identified threat to the patient's life, but is symptomatic and irritating to the patient.
- **Moderate Reaction** is defined as a notable effected area and progression of symptoms which has an obvious or high potential to manifest into an anaphylactic reaction.
- **Severe (Anaphylaxis) Reaction** is defined as patients presenting with, but not limited to, swelling to patient's face and/or neck, hemodynamically unstable, anticipated reaction based on history and/or progression of symptoms are rapid an anticipate patient deterioration.

EMT

- Place patient on the **Cardiac Monitor**
- Obtain **12 Lead EKG –** if time allows
- **CPR** & AED as appropriate to patient presentation
- **Oxygen** administration as appropriate to the patient presentation
- **Airway Adjuncts** (Supraglottic Airway, OPA, NPA), EtCO2 monitoring with EtCO2 NC as appropriate to patient presentation
- Obtain **BGL**
- **Ipratropium Bromide** 0.5 and **Albuterol** 2.5 mg combined in nebulizer – Ipratropium Bromide can only be given once
- **Albuterol** 2.5 mg/3 ml every 5 minutes as needed for patient in extremis

Moderate Reaction

- **Epinephrine** 1:1;000 – 0.3 mgs IM, Repeat in 5 mins **if** the patient is still experiencing Anaphylaxis symptoms
- **Pepcid**: 20 mg PO - if patient can swallow

AEMT

- Establish IV / IO of Normal Saline – Consider a fluid bolus
- **Mild Reaction**: **Diphenhydramine** 12.5 -25 mg IV/IO or 25 -50 mg IM

Paramedic

Moderate Reaction:

- **Dexamethasone** 4 mg Neb & 4 mg IV
  - **Methylprednisolone** 125 mg IV/IM (if Dexamethasone is unavailable)

Severe Reaction

Epinephrine: 0.3-0.5 mg 1:1,000 IM **AND / OR** 0.3 mg 1:10,000 IV/IO - May repeat PRN, no max dose.

- **Terbutaline** 0.25 mg IM or SQ for patient not responding to Epinephrine
- **RSI** as appropriate to patient presentation

PEARLS

- IV administration of Epinephrine should be reserved for the unconscious patient with or reasonably anticipated to lead to hemodynamic compromise
- Use of Epinephrine must be weighed in Risk / Benefit to patients especially with associated cardiac histories and arrhythmias VS the progression of symptoms.
- IM administration of Epinephrine can be in the deltoid or the lateral thigh, however, the lateral thigh does have a significantly faster rate of absorption into the blood stream. Studies have shown a difference of 5 minutes up to 10 minutes before blood serum levels start reaching a therapeutic level.
- In the event of a swollen airway and presented with a "Can't oxygenate, can't ventilation, can't intubate", surgical cric is the primary airway management option.
- Atypical presentations of allergic reactions can be obscure and difficult to identify especially in the absence of hives. A good, thorough physical and verbal examination of the patient is essential.