Clinical Practice Guidelines: Medical/Anaphylaxis and allergy

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<th>Date</th>
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<td>Purpose</td>
<td>To ensure consistent management of patients with Anaphylaxis and allergy.</td>
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<td>Scope</td>
<td>Applies to all QAS clinical staff.</td>
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Anaphylaxis is a life-threatening condition requiring urgent treatment. The Australasian Society of Clinical Immunology and Allergy (ASCIA) defines anaphylaxis as:

“Any acute onset illness with typical skin features (urticarial rash or erythema/flushing, and/or angioedema, PLUS involvement of respiratory and/or cardiovascular and/or persistent severe gastrointestinal symptoms. OR any acute onset of hypotension or bronchospasm or upper airway obstruction where anaphylaxis is considered possible, even if typical skin features are not present.” [1]

Clinical features

Commonly there is a history of a trigger (e.g. an animal sting, food ingestion, or drug reaction). The physical presentation may be localised or generalised, mild to severe and have a gradual or rapid onset.

Clinical features (cont.)

Signs and symptoms may include:

Mild or moderate reaction:
- Swelling of lips, face, eyes
- Hives or welts
- Tingling mouth
- Abdominal pain

Anaphylaxis:
Observe closely for any one of the following signs of anaphylaxis:
- Difficulty/noisy breathing/stridor
- Swelling of tongue
- Swelling/tightness in throat (difficulty swallowing)
- Difficulty talking and/or hoarse voice
- Wheeze or persistent cough
- Persistent dizziness or collapse
- Pale and floppy (young children)
Risk Assessment

- Urticaria, erythema and angioedema may be transient, subtle and easily overlooked. In 1 in 6 fatal food induced anaphylaxis cases, severe cardiovascular symptoms developed without skin or respiratory symptoms.[1]
- Different patients will have different reactions, some may only present with hypotension and/or dizziness.[2]
- Risk factors for fatal anaphylaxis include:
  - Asthma
  - Age (teenagers/older adults)
  - Initial misdiagnosis
  - Delay to, or no adrenaline (epinephrine) administration
- Bolus doses of intravenous adrenaline may increase risk of cardiac arrhythmia or stroke, patients and must be monitored continuously.
- If uncertain whether anaphylaxis or asthma – administer adrenaline prior to bronchodilators.

Additional information

- Paramedics are to maintain a low threshold for appropriate dose intramuscular adrenaline (epinephrine) administration, in order to prevent more severe anaphylaxis from occurring.
- People who have had a prior episode of anaphylaxis often have prescribed medication including adrenaline in the form of an auto injector; early administration of adrenaline is the priority in emergency treatment.
- Multiple doses of adrenaline may be required, beware that patients may relapse even hours after an apparent recovery. All patients should be transported to hospital.[3]
- Promethazine should not be administered for anaphylaxis or severe allergic reaction.
- If no respiratory compromise, position the patient supine with legs elevated, if possible.
- For mainly respiratory reactions, the patient may prefer to sit and this may help support breathing and improve ventilation. BEWARE this may trigger hypotension. Monitor closely. Immediately lay the patient flat again, if there is any alteration in conscious state or drop in blood pressure.
- Patients if at all possible should not be walked to/from the ambulance, even if they appear to have recovered.
Consider:

- Antihistamine
  (symptomatic urticaria)

Anaphylaxis OR Severe allergic reaction?

Y

- Position supine
- Administer parenteral

Consider:

- Oxygen
- Adrenaline (epinephrine)
- IV fluid
- Salbutamol
- Ipratropium bromide NEB
- Hydrocortisone

Transport to hospital
Pre-notify as appropriate

N

Note: Officers are only to perform procedures for which they have received specific training and authorisation by the QAS.

Remove allergen (if present)