

Anaphylaxis - Summary Clinical Paediatric Guideline

Reference no.: CH CLIN G 113/ Dec 21/v004

Diagnosis

Use the ABCDE approach:

- *Airway*
 - Airway swelling eg pharyngeal and/or laryngeal oedema
 - Hoarse voice
 - Stridor

- *Breathing*
 - Shortness of breath (increased respiratory rate)
 - Wheeze
 - Patient becoming tired
 - Confusion caused by hypoxia
 - Cyanosis (late)
 - Respiratory arrest

- *Circulation*
 - Pale, clammy
 - Tachycardia
 - Hypotension, dizziness, collapse
 - Decreased conscious level or loss of consciousness
 - Myocardial ischemia and ECG changes
 - Cardiac arrest

- *Disability*
 - Confusion
 - Agitation
 - Loss of consciousness

- *Exposure*
 - First feature in 80%
 - Vary from subtle to dramatic
 - Erythema
 - Urticaria
 - Angioedema

Document

It is important to clearly document a description of the reaction as diagnosis is a clinical one:

- 1) Signs and symptoms
- 2) Time course
- 3) Trigger
- 4) Treatment required

Drugs used in Anaphylaxis

- 1) **Adrenaline** – as an alpha receptor agonist adrenaline reverses peripheral vasodilation and reduces oedema. Its Beta receptor activity dilates the bronchial airways, increases the force of myocardial contraction and suppresses histamine and leukotriene release. It can also inhibit the activation of further mast cells thus attenuating the severity of the IgE mediated anaphylactic reaction. It works best given early after onset.
It should be given IM into the anterolateral aspect of the middle third of the thigh. Repeated adrenaline doses should be given at 5 minute intervals if there is no improvement in patient condition.

- 2) **Antihistamines** – second line treatment that may help counter the histamine mediated vasodilation and bronchoconstriction.
- 3) **Steroids** – may help prevent or shorten protracted reactions.
- 4) **Bronchodilators**- the presenting symptoms and signs of a severe anaphylactic reaction and life-threatening asthma can be the same. The wheeze should be treated in addition as per asthma guideline (CH Clin G 07)

Discharge Information (see appendix)

All patients require the following prior to discharge

- Information about anaphylaxis, including the signs and symptoms of an anaphylactic reaction
- Information about the risk of a biphasic reaction
- Information on what to do if an anaphylactic reaction occurs (use the adrenaline injector and call emergency services)
- A demonstration of the correct use of the adrenaline injector and when to use it
- Advice about how to avoid the suspected trigger (if known)
- Information about patient support groups.

A personal management plan can be downloaded from

<http://www.bsaci.org/about/download-paediatric-allergy-action-plans?EID=33516109&CID=5429780>

In addition www.Allergyuk.org has downloadable patient information sheets on nearly all allergies.