

# Allergic Reactions including Anaphylaxis (Adults) [53, 60, 63, 301–313]

## 1. Introduction

- The incidence of allergic reactions continues to rise.
- The symptoms range from mild to life-threatening and include:
  - urticaria (hives)
  - itching
  - angio-oedema (swelling of the face, eyelids, lips and tongue)
  - a petechial or purpuric rash
  - dyspnoea
  - wheeze
  - stridor
  - hypoxia
  - hypotension
  - abdominal pain
  - diarrhoea/vomiting.
- The most common triggers are food, drugs and venom (Table 3.45) but in 30% of cases the trigger is unknown.
- Injected allergens commonly result in cardiovascular compromise, with hypotension and shock predominating.
- Slow release drugs prolong absorption and exposure to the allergen.

**Table 3.45 – COMMON TRIGGERS OF ALLERGIC REACTIONS**

### 1 – Foods

Nuts (e.g. peanuts, walnut, almond, brazil, and hazel), pulses, sesame seeds, milk, eggs, fish/shellfish.

### 2 – Venom – insect sting/bites

Insect stings and bites (e.g. wasp and bees). NB Bees may leave a venom sac which should be scraped off (not squeezed).

### 3 – Drugs

Antibiotics (e.g. penicillin, cephalosporin, amphotericin, ciprofloxacin, and vancomycin), non-steroidal anti-inflammatory drugs, angiotensin converting enzyme inhibitor, gelatins, protamine, vitamin K, etoposide, acetazolamide, pethidine, local anaesthetic, diamorphine, streptokinase.

### 4 – Other causes

Latex<sup>a</sup>, hair dye, semen and hydatid.

## 2. Incidence

- It is estimated that allergic reactions affect 30% of adults with anaphylaxis estimated to affect up to 2% of the population.

## 3. Severity and Outcome

- The severity of symptoms varies from a localised urticaria to life-threatening pulmonary and/or cardiovascular compromise – anaphylaxis.
- Generally, the longer it takes for anaphylactic symptoms to develop, the less severe the overall reaction.

<sup>a</sup> Latex allergy has implications for equipment use.

- Some patients relapse after an apparent recovery (biphasic response), therefore, patients who have experienced an anaphylactic reaction should be transferred to hospital for further evaluation.
- The mortality associated with anaphylaxis is estimated to be <1%. Death occurs quickly (venom: 10–15 minutes; food: 30–35 minutes) after contact with the trigger usually as a result of respiratory arrest from airway obstruction.

## 4. Assessment and Management

For the assessment and management of anaphylaxis and allergic reactions refer to Figure 3.7.

Patients with previous episodes:

- May wear 'Medic Alert' bracelets/necklets.
- Carry an adrenaline pen.
- May experience panic attacks.

## Methodology

For details of the methodology used in the development of this guideline refer to the guideline webpage.

## KEY POINTS

### Allergic Reactions Including Anaphylaxis

- **Remove from trigger if possible.**
- **Anaphylaxis can occur despite a long history of previously safe exposure to a potential trigger.**
- **Consider anaphylaxis in the presence of acute cutaneous symptoms and airway or cardiovascular compromise.**
- **Anaphylaxis may be rapid, slow or biphasic.**
- **Adrenaline is key in managing anaphylaxis.**
- **The benefit of using appropriate doses of adrenaline far exceeds any risk.**