ADULT & CHILD ANAPHYLAXIS

1 RECOGNIZE THE SUDDEN ONSET OF EITHER:

- EXPOSURE TO KNOWN OR UNKNOWN ALLERGEN
  - SKIN/MUCOSAL INVOLVEMENT (rash, swelling) AND ANY OF:
    - RESPIRATORY COMPROMISE (dyspnoea, wheeze), OR
    - CARDIOVASCULAR DYSFUNCTION, OR
    - SEVERE GASTROINTESTINAL SYMPTOMS (abdominal pain, repetitive vomiting)

- AFTER EXPOSURE TO KNOWN ALLERGEN
  - RESPIRATORY DIFFICULTY (stridor, voice change, wheeze, hypoxaemia, distress)
  - AND/OR:
    - CARDIOVASCULAR DYSFUNCTION (shock, hypotension, syncope, collapse)
    (No need for skin or mucous membrane involvement)

2 IMMEDIATE TREATMENT:
- REMOVE EXPOSURE
- CALL FOR HELP

3 ASSESS VITAL SIGNS:
- OXYGEN - MONITORS - IV ACCESS
  - High flow oxygen, maintain patent airway (Intubate/Cricothyrotomy if necessary)
  - High flow IV line, BP, Sats, ECG monitoring
  - Lie patient supine with legs elevated if hypotensive

4 ADJUNCTIVE TREATMENT IF NECESSARY

- ADRENALINE
  - 1mg/ml (1:1000) - 0.01mg/kg IM (Max 0.5ml IM)
  - anterolat aspect of thigh
  - Repeat every 5-15 minutes if no improvement or use an auto-injector
  - <6yrs - 0.15ml IM; 6-12 yrs - 0.3ml IM; >12 yrs - 0.5ml IM

- H1 ANTIHISTAMINE
  - Promethazine
    - 2-6 yrs - 6.25mg IM or slow IV
    - 6-12 yrs - 12.5mg IM or slow IV
    - >12 yrs - 25mg IM or slow IV
    (Avoid if <2yrs old and low BP)

- CRISTALLOID
  - Rapid infusion of 20ml/kg (max 1-2 litres)
  - Repeat IV infusion as necessary
  - Adrenaline infusion (0.1 - 1 ug/kg/min)
  - ONLY if unresponsive to IM adrenaline & fluids

- H2 RECEPTOR ANTAGONIST
  - Cimetidine
    - IM or Slow IV
    - 5mg/kg (Max - 300mg)
    - Diluted in 20ml over 2 min

- CORTICOSTEROIDS
  - Hydrocortisone
    - IM or Slow IV
    - <1 yr - 25mg; 1-6 yrs - 50mg; 6-12 yrs - 100mg; >12 yrs - 200mg

- NEBULISED BRONCHODILATORS
  - Every 15-20 mins if severe bronchospasm
  - Salbutamol 5mg WITH
  - Ipratropium 0.5mg

- GLUCAGON
  - 20ug/kg (Max 1-2mg)
  - IM or slow IV every 5 mins if unresponsive to adrenaline
  - (Look out for vomiting and hyperglycaemia)

RISK REDUCTION STRATEGIES
- Only discharge patient if clinically stable 4-6 hours after resuscitation (may need longer if at risk of biphasic reaction)
- Provide a written anaphylaxis emergency action plan, including how to administer IM adrenaline
- Refer to specialist for investigation and management
- Provide patient education (www.allergyfoundation.co.za) and medic-alert bracelet

FAQ's:

When is it appropriate to initiate treatment for Anaphylaxis?
- Treat anaphylaxis at diagnosis with IM adrenaline even if severe respiratory or cardiovascular symptoms are not yet present.

Why are Antihistamines considered adjunctive treatment?
- H1-antihistamines may relieve itching and urticaria but do not prevent or relieve life-threatening symptoms of anaphylaxis. Antihistamines should not be used alone, or instead of adrenaline, for anaphylaxis.