Information for Health Professionals

Managing Allergic Reactions Algorithm

THINK OF AN ALLERGIC REACTION IF ACUTE ONSET (minutes to several hours)
& any of the following:

MILD TO MODERATE
- Swollen lips, face or eyes
- Urticaria or itchy skin rashes
- Itchy/tingling mouth
- Abdominal pain or vomiting

SEVERE /ANAPHYLAXIS
- Dyspnoea, wheeze, stridor, hypoxia, tight throat, excessive coughing
- Hypotension/collapse

+/-

- Involvement of skin and mucosal tissue (urticarial/angioedema)

CONSIDER ANAPHYLAXIS IF 2 ORGAN INVOLVEMENT

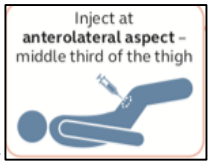
Anaphylaxis can happen in the ABSENCE of any skin involvement.

Anaphylaxis is TIME CRITICAL. ALWAYS call SENIOR for help

IDENTIFY & REMOVE ALLERGEN

MILD TO MODERATE REACTIONS
- Chlorphenamine PO/IM
  If no response, Cetirizine PO >12 months old
- Look for causes i.e., food induced
- Observe

CONFIRMED/SUSPECTED ANAPHYLAXIS
- **IM ADRENALINE** as soon as possible
- High flow Oxygen & positioning



If no response in 5 min:
- Repeat **IM ADRENALINE**
- IV fluid bolus e.g., 0.9% NaCl 10ml/kg

Important to think of other causes especially resistant to treatment i.e. inhaled FB

If no improvement in respiratory OR CVS symptoms after 2 doses of IM Adrenaline: CONSIDER REFRACTORY ANAPHYLAXIS
- Seek for expert help (Anesthetist/PICU)
- Establish IV/IO assess
- Repeat IV fluid bolus AND set up **low dose IV ADRENALINE infusion**
- Give **IM ADRENALINE** every 5 minutes until Adrenaline infusion has been started

Continue adrenaline infusion and treat other symptoms while waiting for PICU transfer:
- Nebulised/IV Salbutamol
- IV antihistamines
- IV hydrocortisone (ONLY in refractory reactions/shock/asthma)
- If refractory to adrenaline infusion, consider a second vasopressor

****Consider anaphylaxis if:** Acute onset after exposure to a potential allergen + 2 organs involvement (Resp/CVS/GI)****

- www.beatanaphylaxis.co.uk -

Document created by Dr Rachel Lee (July 2021)

ANAPHYLAXIS MEDICATIONS & DOSES

Adrenaline 1:1000 IM (outer thigh) (repeat after 5 min if no better) >12 years: 500 micrograms IM (0.5 mL) 6-12 years: 300 micrograms IM (0.3 mL) *If child small or pre-pubertal: 300 micrograms IM (0.3ml) 6 months-6 years: 150 micrograms IM (0.15 mL) <6 months: 100-150 micrograms (0.10-0.15 mL) IM	**Hydrocortisone IV/IM** <6 months: 25mg 6 months – 6years: 50mg 6 – 11 years: 100mg >12 years: 200mg
Oral Antihistamine (after stabilisation): <6months: Chlorphenamine maleate 1mg 6 months-2 years: Cetirizine hydrochloride 2.5mg 2–6 years: Cetirizine hydrochloride 5 mg >6 years: Cetirizine hydrochloride 10 mg	**Chlorphenamine IV/IM:** <6months: 250mcg/kg, max 2.5mg 6 months -6 years: 2.5 mg 6-12 years: 5mg >12 years: 10mg *repeat if necessary, max 4 doses/day
OTHERS DRUGS: **Prednisolone Oral:** 1-2mg/kg (max 40mg) **Adrenaline Nebulised:** 400mcg/kg/dose (max 5mg) **Salbutamol Nebulised:** 5mg (2.5mg if <5y) **Salbutamol Inhaled**: 10 puffs via large volume spacer	**Crystalloid:** 10 mL/kg **Stop any IV colloid if this might be the cause of anaphylaxis

FURTHER MANAGEMENT

DOCUMENT
All clinical features of the reaction, time of onset, the circumstances immediately before the onset of symptoms, observations in department, medications given and potential trigger

MILD TO MODERATE
- Observe until evidence of improvement (minimum 2 hours)
- Consider antihistamine for use regularly over next 24- 48 hours if unsure about trigger

SEVERE/ANAPHYLAXIS

Respiratory symptoms and signs
- Close monitoring for a minimum 6 hours after onset of reaction for biphasic reaction

Hypotension / collapse
- Admit until well (minimum 12 hours)

On discharge, education MUST be given (refer to discharge checklist):

1. Possibility of late-phase symptoms at 6-12 hours
2. Food avoidance measures