

# Management of acute Anaphylaxis



## Clinical signs (look for)

- Sudden airway/breathing difficulty,
- cardiovascular change
- +/- skin changes (rash/itching/swelling)

## LIFE-THREATENING SIGNS

- Hoarse voice, stridor
- ↑ work of breathing, wheeze, cyanosis, SpO<sub>2</sub> < 94%
- Signs of shock, low BP, confusion, ↓ level of consciousness

**CALL 2222 PAEDIATRIC CARDIAC ARREST**

**Give IM adrenaline 1:1000 1mg/ml**

- **Remove trigger! (IV drug/clothes etc)**
- **Lie flat if possible**
- **15L O<sub>2</sub> (NRB mask)**
- Apply ECG, BP, pulse oximetry
- Get IV/IO access
- Send mast cell tryptase

## IM adrenaline 1:1000 (1mg/ml):

- >12 years: 500 micrograms IM (0.5 mL)
- 6–12 years: 300 micrograms IM (0.3 mL)
- 6 mo - 6 years: 150 micrograms IM (0.15 mL)
- <6 months: 100–150 micrograms IM (0.1–0.15 mL)

- If no improvement - repeat IM adrenaline dose
  - Give IV fluid 10mls/kg
- NB chloramphenamine/steroids are not priority

Inject at **anterolateral aspect** – middle third of the thigh



**Call PaNDR for advice 24 hours  
01224 274274**

## If no response => REFRACTORY ANAPHYLAXIS

- Prepare adrenaline infusion
- Continue IM adrenaline dose every 5 minutes until infusion started
- Continuous monitoring and observation is mandatory. ↑↑ BP is likely to indicate adrenaline overdose

## Adrenaline Infusion:

- 1 mg (1 mL of 1 mg/mL [1:1000]) adrenaline in 100 mL of 0.9% sodium chloride
- 0.5–1.0 mL/kg/hour **Titrate to response**
- Prime & use dedicated line with infusion pump (not in the same limb of BP cuff)



## AIRWAY OBSTRUCTION

- Adrenaline nebulisers 5mls (1mg/ml)
- DAS algorithm



## BRONCHOSPASM

- Oxygenation & BVM +/- intubation
- Salbutamol & Ipratropium nebuliser + O<sub>2</sub>
- IV salbutamol/ aminophylline
- Sevoflurane/ inhaled anaesthesia



## ONGOING CVS COMPROMISE

- 10mls/kg boluses Hartmanns/plasmalyte
- Invasive BP monitoring
- Central venous line
- Add Noradrenaline 0.2-1mg/kg/min or Vasopressin 0.3-1 units/kg/hr
- +/- referral for ECMO

**Cardiac arrest: APLS algorithm: Early CPR, Aggressive IVF, Adrenaline IO/IV, +/- ECMO if Prolonged CPR**