Antihistamines

Toxicity varies between antihistamines but is generally dose dependent. Anticholinergic delirium + arrhythmias are features of severe toxicity.

Toxicity / Risk Assessment

Sedating Antihistamines:

- Promethazine: sedation, 33% incidence of anticholinergic delirium with ingestions > 250 mg (50% > 1000 mg)
- Diphenhydramine: > 1000 mg – expect severe toxicity
- Pheniramine: more likely to cause seizures
- Chlorpheniramine: sedation and anticholinergic toxicity
- Doxylamine: rhabdomyolysis associated with >20 mg/kg

Non-sedating Antihistamines:

- Loratadine, cetirizine and fexofenadine: sedation, ↑QT, anticholinergic toxicity following large ingestions

↑QT and ↑QRS durations have been reported following large sedating and non-sedating antihistamine overdose

General clinical features:

- CNS: sedation, agitated delirium
- CVS: tachycardia, arrhythmias, hypotension
- Anticholinergic: warm dry skin, urinary retention
- Rarely: seizures / hyperthermia / rhabdomyolysis

Management

Supportive care is the mainstay of management

Decontamination

Activated charcoal should be offered to alert cooperative patients within 2 hours of ingestion

Agitation

- Check for urinary retention and signs of anticholinergic delirium

Anticholinergic delirium

- Exclude urinary retention
- Supportive care +/- titrated doses of diazepam (5-10 mg oral 30 minutely PRN or IV 10-15 minutely PRN)
- Consider physostigmine (discuss with clinical toxicologist – see separate guideline)
- Droperidol may be required in severe behavioural disturbance resistant to benzodiazepines

Seizures

- Benzodiazepines: Diazepam 5 mg IV every 5 minutes as necessary

Widened QRS duration > 120ms OR Ventricular arrhythmias

- The effectiveness of serum alkalinization is variable, see separate '*QRS prolongation'* guideline

Prolonged QT interval

- see separate '*QT prolongation'* guideline

Disposition

- Discharge pending mental health assessment if clinically well with normal cardiovascular state + the patient has passed urine + normal ECG at 6 hours post exposure
- Advise the patient not to drive for at least 72 hours post exposure