

## Phenothiazines: Chlorpromazine, Periciazine, Prochlorperazine

### **Toxicity / Risk Assessment**

- Toxicity is dose dependent
- One tablet in a child may produce significant toxicity
- With ↑ dose: ↑HR, ↓BP (alpha-receptor blockade), anticholinergic effects, sedation, agitated delirium
- Onset of effects occurs within 4 hours
- Large exposures may lead to coma lasting > 24 hours

### **Clinical features:**

**Central Nervous System:** drowsiness, agitated delirium, coma (may be prolonged), seizures, miosis may occur in large exposures (alpha receptor effect), extrapyramidal effects (rare, often delayed)

**Cardiovascular:** tachycardia, hypotension, QRS prolongation (usually not clinically significant)

**Anticholinergic effects:** ↑HR, agitated delirium, mydriasis urinary retention, warm dry skin, seizures

**Other:** neuroleptic malignant syndrome (usually associated with therapeutic dosing, rather than overdose), respiratory depression

### **Management**

- Maintain airway. Intubation may be required in large overdoses

### **Decontamination**

- Consider activated charcoal 50g within 2 hours of ingestion in patients at risk of significant toxicity
- Patients with severe toxicity should receive activated charcoal 50g via NGT post intubation

### **Hypotension**

- **Fluid:** initially load with 10-20 mL/kg IV crystalloid
- Hypotension resistant to IV fluid should initially be treated with norepinephrine

### **Anticholinergic delirium**

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

### **Extrapyramidal Side Effects (EPSE)**

- May be delayed up to 72 hours. Benztropine 1-2 mg IV (paediatric dose: 0.02 mg/kg up to 1mg).
- Dose may be repeated in 20 mins.

### **Disposition**

- Discharge pending mental health assessment if asymptomatic 6 hours post exposure