

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

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

Other: neuroleptic malignant syndrome (usually associated with therapeutic dosing, rather than OD), 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)
- Droperidol may be required in severe behavioral disturbance resistant to benzodiazepines

Extrapyramidal Side Effects (EPSE)

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

Ventricular arrhythmias in setting of wide QRS > 120ms (discuss with clinical toxicologist)

- 1 mL/kg 8.4% solution of NaHCO₃ slow IV bolus, repeat every 5 minutes until arrhythmia resolved
OR serum pH = 7.50-7.55 (avoid pH>7.55)

Disposition

- Discharge pending mental health assessment if asymptomatic 6 hours post exposure
- Advise patient not to drive for at least 72 hours post exposure