Clozapine

Clozapine is an atypical antipsychotic, which causes CNS depression, anticholinergic toxicity and hypotension in overdose

Toxicity / Risk Assessment

Toxicity is more pronounced in clozapine naïve patients and in paediatric patients

There is a poor relationship between dose and toxicity

Clinical features:

- CNS depression, mydriasis OR miosis
- Anticholinergic – tachycardia, warm dry skin urinary retention
- Postural hypotension, ↓BP
- Hypersalivation (not always present)
- Onset of clinical toxicity occurs within 4 hours

Less common clinical features

- Seizures in 5-10% of patients
- Coma requiring intubation
- QT interval prolongation (TdP not reported)

Extrapyramidal side effects can occur in paediatric patients and may be delayed in onset

Myocarditis and bone marrow suppression (↓WCC) can occur with therapeutic dosing, but are not features of acute overdose

Management

Patients with significant CNS depression with compromised airway protection should be intubated

Decontamination:

Consider **Activated Charcoal 50 g** in adults who have ingested > 10 mg/kg within the previous 2 hours

Intubated patients should receive 50 g AC via a naso / oro-gastric tube (after confirmation of placement)

Hypotension

- Fluid: initially load with 10-20 mL/kg IV crystalloid
- Persisting hypotension (rare) can be managed initially with a norepinephrine infusion

Agitation / Seizures

- Seizures - Diazepam 2.5-5 mg IV q10 minutely titrated to response
- Monitor for urinary retention

Extrapyramidal Side Effects

- Treat along conventional line - Benztropine 1-2 mg IV/ IM (0.02 mg/kg children – maximum 1 mg)

Disposition:

- Asymptomatic patients with a normal ECG 6 hours post exposure can be discharged pending mental health assessment (do not discharge patients at night)
- Patients should be advised extrapyramidal side effects may occur for up to 7 days post overdose
- Advise patient not to drive for at least 72 hours post exposure

Measurement of clozapine concentration has no role in acute poisoning