Dextromethorphan (DXM)

DXM is often found in cough syrup preparations and is used recreationally. DXM preparations may contain paracetamol.

Toxicity / Risk Assessment

DXM is a serotonin and opioid agonist, and NMDA receptor antagonist

Onset of symptoms occurs within 30-60 minutes of ingestion

Dose-dependent toxicity seen with ingestions >1.5mg/kg

Typical preparations contain up to 3mg of DXM/mL of syrup

Some preparations may also contain paracetamol or anticholinergics

Clinical features:

- **CNS:** Dilated pupils, euphoria, restlessness, anxiety, agitation, paranoia, ataxia, auditory and visual hallucinations, mania, partial or complete dissociation, psychosis, seizures.
- **CVS:** Hypertension, tachycardia
- **GUT:** Urinary retention
- **Serotonin toxicity**: In isolation or with co-ingestion of other serotonergic agents

Withdrawal after 2-3 days of abstinence in long-term users may occur:- nausea, vomiting, diaphoresis, myalgias, diarrhoea and restlessness

Management

Good supportive care is the mainstay of treatment

Decontamination: Activated charcoal is **not** recommended due to rapid absorption

Serum paracetamol screening is recommended if formulation is unknown

Patients with marked psychedelic effects should be nursed in a quiet environment with low lighting

Agitation:

Benzodiazepines*:* Diazepam 2.5 - 5 mg IV 10-minutely, OR 5 –10 mg PO 30-minutely until sedated

OR Droperidol: 5 – 10 mg IM / IV (if severe agitation)

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

Serotonin Toxicity: *(see separate serotonin toxicity guideline)*

There is no role for enhanced elimination techniques

Disposition:

- Discharge if clinically well 6 hours post exposure
- Exposures due to deliberate self-harm warrant mental health assessment