Clinical Practice Guidelines: Toxicology and toxinology/Psychostimulant emergencies

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<th>Date</th>
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<td>Purpose</td>
<td>To ensure a consistent approach to the management of Psychostimulant emergencies.</td>
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<td>Scope</td>
<td>Applies to all QAS clinical staff.</td>
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<td>Information security</td>
<td>This document has been security classified using the Queensland Government Information Security Classification Framework (QGISCF) as UNCLASSIFIED and will be managed according to the requirements of the QGISF.</td>
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Psychostimulants are a group of drugs that stimulate the activity of the CNS, with a variety of therapeutic applications. However, they are best known as drugs of abuse, with amphetamines being the second most commonly used illicit drug in Australia after cannabis.[1] They are usually taken intranasally (snorting) or orally (bombing), with intravenous drug use (IVDU) usually suggesting a higher level of dependence and being associated with a greater potential for toxicity.

In toxic levels they can produce severe agitation and psychotic behaviour, but over-stimulation of the sympathetic nervous system causes serious complications such as myocardial ischaemia, severe hypertension, hyperthermia, coagulopathy and rhabdomyolysis.[2]

Psychostimulant medications:
- Dexamphetamine
  - used to treat attention deficit hyperactivity disorder (ADHD) and narcolepsy.
- Methylphenidate hydrochloride (e.g. Ritalin)
  - used to treat ADHD.
- Diethylpropion hydrochloride and phentermine
  - appetite suppressants.

Illicit psychostimulants:
- Amphetamine and methamphetamine
- Cocaine
- Methyleneoxymethamphetamine (MDMA)

Clinical features

Clinical feature of acute toxicity:
- restlessness, agitation, rapid speech, hyper-vigilance, paranoia
- motor agitation or pacing
- tachycardia, hypertension, hyperthermia
- other features of toxicity will reflect underlying processes (e.g. CVA, AMI, rhabdomyolysis etc)
- the usual assessment should take place.

Chronic use features:
- malnutrition
- sores on skin (from delinium and hallucinations of bugs on skin)[3]
- evidence of IVDU (e.g. needle marks or thrombophlebitis)
**Additional information**

- **Withdrawal**: sudden discontinuation after excessive use may cause a withdrawal state with hypersomnia, hyperphagia, irritability and aggression, depression and craving.

**Note**: Officers are only to perform procedures for which they have received specific training and authorisation by the QAS.

**Consider:**
- QPS assistance
- Verbal de-escalation
- Physical restraint
- EEA

**Manage as per:**
- CPG: Sedation – Acute behavioural disturbance

**Transport to hospital**

**Pre-notify as appropriate**

**Consider:**
- 12-Lead ECG
- Treat symptomatically

**Evidence of sympathetic nervous system overdrive agitation?**

**Consider:**
- Droperidol
- EEA