ST VINCENT'S HOSPITAL MELBOURNE

Version 1 (2014)

GUIDELINES FOR THE ACUTE ASSESSMENT AND MANAGEMENT OF AMPHETAMINE-TYPE STIMULANT INTOXICATION AND TOXICITY

Intoxication

Important questions:

1. In the last 24-48hrs, have you used:
   - amphetamines or methamphetamines?
   - other stimulants (eg high dose caffeine, cocaine, MDMA, prescription stimulants, other synthetic stimulants)?
   - other substances (eg EtOH, GHB, THC, synthetic cannabis, opioids, hallucinogens, solvents, OTC)?
   - other medications (especially SSRIs)
2. What time did you last use?
3. Dose? Route?

Signs/symptoms of intoxication:

- New or worsening mental health symptoms (anxiety, panic, hallucinations, paranoia)
- Alertness, hypervigiliance, impulsivity
- Euphoria, ↑confidence, excitement
- Agitation, irritability, anger, hostility
- Psychomotor agitation (pacing, restlessness), repetitive movements, tremor
- Rapid/ pressured speech
- Decreased appetite/need for sleep
- Flushed cheeks, sweating, dry mouth
- Teeth grinding, jaw clenching
- Dilated pupils or sluggish light reflex
- Hypersexuality, at risk sexual behaviours
- Hypertension, tachycardia
- signs of recent physical injury (head injury)
- Injecting sites for signs of infection

Toxicity (medical emergency)

Presentations of toxicity:

Acute behavioural disturbance

2. Medical complications
   - hyperthermia
   - serotonin syndrome (see bottom right)
   - electrolyte disturbances (↓ Na,↓ K); ↓ BSL
   - rhabdomyolysis, renal failure
   - acute cardiac events
   - acute cerebrovascular events
   - delirium, seizures, coma, death

Investigations:

- Full set of physical observations
- Neurological examination including GCS, pupillary response, tone/power/tremor
- Finger-Prick Blood Sugar Level
- Urine Full Ward Test for proteinuria
- Pathology: FBVEEUC, Mg, LFTs, CK (add troponin if chest pain)

Additional:

- ECG (if chest pain, SOB, SaO_2 dropping, hypertension, or tachycardia)
- CT brain (if altered conscious state, focal neurological signs, severe headache)

Management of Medical Complications

DRABC

- Remain with patient
- Minimise stimulation in surrounding area
- Explain what is happening to patient and what they can expect (other clinicians arriving)

Requires urgent medical care (+/- Code Blue) if:

- BP ≥ 180/120 mmHg
- Chest pain, shortness of breath
- Severe headache
- Seizure
- Sudden neurological changes (eg. speech changes or limb weakness, facial droop, gait disturbance)
- **Serotonin syndrome/toxicity:**
  - Temp ≥38°C, flushing, sweating, tachycardia, mydriasis
  - ↑ reflexes, shivering, tremor, clonus, myoclonus, ocular clonus, ↑ muscle tone/rigidity
  - Altered conscious state (including delirium, confusion, disorientation)

Withdrawal

Withdrawal symptoms can commence within 24 hours of the last dose, peak at day 2-3 after last use and can continue for 2 weeks. Consider polysubstance withdrawal.

Common signs/symptoms of stimulant withdrawal:

- Cravings
- Mood changes including irritability, agitation, low and/or anxious mood, anhedonia, affective instability
- Psychomotor agitation
- ↑ sleep, vivid dreams; ↑ appetite
- Poor memory/concentration
- Fatigue, lack of energy, generalised aches/pains

Management:

- Determine safest environment for withdrawal
- Supportive treatment including diazepam (should be continued for up to two weeks).
- Mx acute physical/MH issues

****Note a high risk of relapse/overdose during this period.**

NEXUS Concurrent Mental Illness & Substance Use Advisory Service

Dual Diagnosis Victorian Dual Diagnosis Initiative

GUIDELINES FOR THE MANAGEMENT OF ACUTE BEHAVIOURAL DISTURBANCE DUE TO AMPHETAMINE-TYPE STIMULANT INTOXICATION

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Version 1 (2014)

STEP 1 – (Arousal levels 2-3)

Mildly aroused, pacing, still willing to talk reasonably.

Moderately aroused, agitated, becoming more vocal, unreasonable and hostile.

ORAL

(Benzodiazepine) **Diazepam** (peak effect at 1 –1.5 hrs): 5 to 20mg, repeated every 2 to 6 hours, up to a maximum of 120mg in 24 hours

OR

(Antipsychotic) **Olanzapine** (peak effect at 1 to 3 hrs): 5-10mg wafer repeated if necessary every 2 hours to a maximum of 30mg in 24 hours.

Review after 30-60 minutes, repeat if necessary every 2 hours. *If still ineffective, consider Step 2*

PRECAUTIONS:

- Lower doses should be considered in the elderly, patients with low body weight, dehydration or no previous exposure to antipsychotic medication.
- Monitor respiratory function when benzodiazepines are administered, especially parentally.
- Monitor postural BP 30 min post-dose.
- Monitor ECG, K & Mg, especially if using droperidol & high doses of other antipsychotics.
- Monitor ECG, FBE, U&E, Mg, CK and troponin if using zuclopenthixol acetate.

STEP 2 – (Arousal levels 3-4)

Moderately aroused, agitated, becoming more vocal, unreasonable and hostile.
Highly aroused, possibly distressed and fearful.

ORAL

(Antipsychotic) **Olanzapine** (peak effect at 6hrs): 10-20mg wafer repeated if necessary every 2 to 6 hrs up to a maximum of 30mg in 24 hours.

PLUS

(Benzodiazepine) **Diazepam** (peak effect at 1 –1.5 hrs): 5 to 20mg, repeated every 2 to 6 hours, up to a maximum of 120mg in 24 hours.

Review after 30-60 minutes, repeat if necessary.
If still ineffective, consider Step 3

N1 Create opportunity and environment for patient to express fears, frustration, anger, etc. **(Ventilation)**

N2 Explore with patient what interventions/solutions would assist them to gain control **(Redirection)**

N3 Assess "time out" opportunity for patient to regain control (5-15min duration) **(Time Out)**

N4 If clinical situation warrants, patient may require restraint **(Restraint)**

N5 If required to place client in a safe environment seclusion might be considered. Explanation to be given to patient and staff **(Seclusion)**

The patient should be afforded the opportunity to debrief about the episode, at a reasonable interval.

STEP 3 – (Arousal levels 4-5)

Refusing oral medication, moderately aroused, agitated, becoming more vocal, unreasonable and hostile.
Highly aroused, distressed and fearful; violent toward self, others or property.

INTRAMUSCULAR

(Antipsychotic) **Olanzapine** (peak effect at 15 to 45 mins): 10mg may repeat every 2 hrs to a max. of 30mg in 24 hrs
OR
Droperidol (peak effect at ≤30 mins) 2.5-10 mg IMI, may repeat every 20 mins. to a max. of 20mg in 24 hrs
OR

Zuclopenthixol Acetate (onset ≤2h, peak effect ~24h)
Note: Use only if 1° psychotic disorder, high likelihood of recurrent agitation/ aggression, and maximum daily dose of IM olanzapine inadequate.
1st dose 100mg (lower in elderly or small stature).
2nd dose after 48-72 hrs (min. 24 hrs). 3rd dose after 48-72 hrs (min. 24 hrs). Concurrent IM Benzodiazepine (in separate syringe). Avoid giving other IMI antipsychotics.

(Benzodiazepines) **Clonazepam** (peak effect at 3 hrs): 1-2 mg , may repeat after 2 hrs, then every 4 hrs up to 4mg in 24 hrs. **OR**, if more rapid but shorter effect is required, consider **Midazolam** 0.1mg/kg:

ALERTS:

- **Vigilantly monitor for signs of airway obstruction, respiratory depression and hypotension (esp. Acuphase)**
- **EPSEs must be monitored and treated.**
- **Anticholinergic agents NOT to be used routinely but 'as required' (PRN); Benztropine 2mg IM may be used for acute dystonias (Max 6 mg/24 hrs).**
- **Combined use of Olanzapine IMI plus a benzodiazepine is potentially dangerous: *a gap of 2 HOURS IS REQUIRED BETWEEN THEIR IM USES.***
- **IM Midazolam should only ever be prescribed by a consultant and special precautions MUST be followed**
- **Zuclopenthixol acetate should be prescribed as a course, *NOT as a PRN.* ≤4 IMIs, ≤400mg in 2 wks**

NOTE: These guidelines are reflective of the local Australian context: other jurisdictions might have other preferred medications.

ST VINCENT'S HOSPITAL MELBOURNE

STAGES OF CHANGE & MATCHING INTERVENTIONS

Version 1 (2014)

Stage	Definition	Characteristics	Intervention/Tasks
Precontemplation	Individual has no intention to change behaviour in the near future and may not identify a problem with their behaviour.	May appear unmotivated or resistant Avoid information, discussion or thoughts regarding the behaviour Defensive or sometimes passive	Engage; avoid being judgmental Raise doubt; ↑ awareness of risks/problems a/w using Brief interventions: educ^{n}, harm red^{n} Offer DirectLine no.: 1800 888 236
Contemplation	Individual considering change; ambivalent. Although they may be aware of the benefits, they remain focussed on the costs of change.	Ambivalent about using/stopping Dissonance between "good" and "less good" aspects of using Might procrastinate	Motivational interviewing, incl: Decisional balance: evoke reasons for change, risks of not changing; facilitate pt to develop discrepancy Strengthen self-efficacy for change Provide DirectLine no.: 1800 888 236
Determination / Preparation	Making of decision, making plans. Individuals intend to take steps toward change (eg within the next month). This stage is viewed as a transitional rather than a stable phase.	Planning and intending to change	Offer options and assist in developing strategies to change; may incl. discussion of detox, psychotherapy, pharmacotherapy, lifestyle changes
Action	Individual has firmly decided and is making change. May be considered to be within this stage if these modifications have occurred for less than 6 months.	Modifications in behaviour Commitment (verbalised or demonstrated) Open to suggestions	Support implementation of a plan Use skill base; problem solve Support self-efficacy Begin to discuss lapses/relapses
Maintenance	Individual's change in behaviour has been sustained over a period of time.	Works to prevent relapse Reports higher levels of self-efficacy Consolidates gains achieved in the Action stage Less frequently tempted to use	Identify and use strategies to prevent relapse; consolidate other activities Resolve associated issues/ problems (e.g. mental illness) Help set new goals
Lapse/Relapse	Individual returns to the behaviour, temporarily (lapse) or for a longer period of time (relapse).	Lapses → Action stage Relapses → any other stage Particular feelings of failure/guilt may appear Both can provide valuable learning opportunities	Anticipate and plan for both Normalise relapse as a common occurrence; empathise, encourage Assist person to look at why it occurred and make plans to cope with similar situations in the future Assist person to renew motivation and efforts

GUIDELINES FOR THE LONG-TERM MANAGEMENT OF AMPHETAMINE MISUSE AND DEPENDENCE

ST VINCENT'S HOSPITAL MELBOURNE

Version 1 (2014)

Assess current patterns of substance use
What, how much, how often (?days off), route, past withdrawal or treatment, past abstinence

2. **Assess for and treat comorbidity**
   - Other substances
   - Mental health (eg psychosis, depression)
   - Physical health (eg infection, dental, cardiac)

3. **Assess risks**
   - Overdose, toxicity
   - local/systemic infection incl. blood-borne viruses, cardiac/cerebrovascular events, poor dentition, STIs, poor nutrition, dehydration
   - Accidental injury, violence (incl. sexual)
   - Psychosis, suicidal ideation, worsening of mental state
   - Poverty, homelessness, relationship breakdown, unemployment
   - Legal difficulties (drug driving, illicit activities to fund use, possession/dealing)

4. **Assess for evidence of dependence**
A person may be at higher risk of dependence if they:
   - use crystal methamphetamine ("ice")
   - use frequently and in higher doses
   - inject

5. **Assess stage of change and reasons for use**
(for each substance)

6. **Assess goals of treatment**
   - Cessation vs cutting back
   - Continue or cease other drug use
   - Other goals including improving sleep, mental health, physical health, social/occupational functioning

Management

BRIEF INTERVENTION

- Harm reduction advice
- Education about stimulants and the potential impact on physical and mental health
- Motivational interviewing matched to stage of change
- Mental and physical health screens (can also be used as part of education)
- Drug and alcohol counselling (may include referral to Addiction Medicine or an external agency)

SUPPORTED WITHDRAWAL

The management of amphetamine withdrawal is largely supportive, as there is no specific pharmacotherapy at this time. Although many people can safely be managed at home, consider an environment with increased supports in the setting of:

- the use of, or withdrawal from, multiple substances
- mental health needs requiring immediate management, including an increased risk of harm to self or others
- physical health needs requiring immediate management
- a lack of a suitable supportive environment in the community

MANAGEMENT OF DEPENDENCE

Medication
No specific substitution therapy.
Consider mirtazapine, particularly if co-existing anxiety/depression.

Psychosocial interventions
- Motivational Interviewing (MI)
- Cognitive behaviour therapy (CBT)
- Relapse prevention strategies
- Mindfulness-based cognitive therapy (MBCT)
- Acceptance and Commitment therapy (ACT)
- Consider referral to AOD Counselling

Self-help/Peer support groups
- Narcotics Anonymous
- SMART Recovery
- Crystal Meth Anonymous
- New Life Program

Carer support groups
- Family Drug Help (incl. Sibling Support)
- Family Drug Support Australia

Residential Rehabilitation
- **DirectLine (1800 888 236)** for 24hr info. & referral advice for patients, carers, and clinicians.

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