Symptom-Triggered Alcohol Detoxification therapy (STT) in the ED Clinical Decisions Unit

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This guideline describes the standardised assessment (using the CIWA-Ar scale) and management of alcohol withdrawal using the symptom-triggered method, which we have found to be especially appropriate in the short-stay clinical decisions unit of the Emergency Department.

1. What patients are <u>not</u> suitable for STT?

- Patients in the main ED awaiting medical/surgical admission
- Patients with dependency on other drugs in addition to alcohol.
- Patients with severe liver impairment, respiratory failure or other major physical illness.
- Patients who are non-verbal/ unable to communicate.

2. What patients are suitable for STT?

- Patients must be in CDU
- Patients in obvious withdrawal ie hand tremor, agitation, CIWA-Ar score>10 (see below for scoring details); autonomic hyperactivity (ie sweating, pulse>100)
- Patients not in withdrawal but with a clear history (drinking >10 units per day, previous withdrawal). Note: If such a history is not evident, observe informally for signs of withdrawal as many people with dependent drinking will deny it. Patients with a history of previous alcohol-withdrawal seizures or delirium tremens are also suitable.

3. How to assess the severity of withdrawal using the CIWA-Ar scale score

- Take the CIWA-Ar scale (see below) with you when assessing the patient.
- Ask each question as it appears on the CIWA-Ar and assign a score to each item. Speak slowly and clearly and reword questions, if necessary. Do not verbally contradict what the patient tells you.
- Adjust the score based on the subjective and objective signs and symptoms. Add up the number of points and assign a total score.
- Record Vital Signs and level of arousal separately every 90 minutes. These are not factored into the overall scoring but they provide important clinical information. Slight elevation of these signs is common. Remember drowsiness is not a feature of alcohol withdrawal. Look for other causes.

4. What to do when CIWA-Ar score is >10

- Give diazepam 20mg po stat (record this on the drug cardex)
- After 90 minutes, reassess symptoms of withdrawal, using the CIWA-A again.
- If the CIWA-Ar score is still >10, give diazepam 20mg po stat again.
- Repeat the above process every 90 minutes until CIWA-Ar is <10

5. What to do when CIWA-Ar score is <10

- Give no medication
- After 90 minutes, reassess symptoms of withdrawal, using the CIWA-Ar again.
- When CIWA-Ar score <10 on 3 consecutive occasions, STT detoxification is complete. CIWA-Ar assessments may be stopped but continue then to monitor informally to ensure there is no re-emergence of symptoms.

6. What to do when CIWA-Ar score remains >10 after 24 hours

- The diagnosis of Alcohol Withdrawal should be reviewed.
- Look for other causes (ie benzodiazepine dependency, drug seeking behaviour, organic agitation as part of delirium or other cause).
- Discontinue STT detoxification, consider other drug treatment strategies and if necessary investigate further.

7. What about Pabrinex?

- Wernicke-Korsakoff Syndrome (WKS) is a neurological syndrome of Vitamin B deficiency that may have serious sequelae.
- Prophalaxis against Wernicke-Korsakoff Syndrome should be given to <u>all</u> alcohol dependant patients in CDU. Give Pabrinex (Ampoules I & II) iv once daily for up to 3 days if admitted and give oral thiamine 300mg daily on discharge. Pabrinex should be diluted in 100ml saline or dextrose (infused over 30 minutes). Give high-dose Pabrinex (2 pairs of Pabrinex Ampoules I & II three times daily) in all patients with any signs of possible WKS, (ie acute delirium/ataxia/gaze palsy) and continue for as long as symptoms are improving.

References : a) Saitz R, et. al. JAMA. 1994;272(7):519-523 ; b) Day E. Psychiatric Bulletin (2004) 28: 407-410; c) Harden R, Page AV. Emerg Med J 2005;22:805-806; d) Sullivan JT, Skykora K, Schneiderman J. Br J Addict 1989;84:1353-7 ; e) Heinälä P, Piepponen T, Heikkinen H. Int J Clin Pharmacol Ther Toxicol. 1990 May;28(5):211-7 ; f) Salloum IM, Cornelius JR, Daley DC, Thase ME. Psychopharmacol Bull. 1995;31(2):305-10; g) Thompson AD, Cook CCH, Touquet R, Henry J. Alcohol & Alcoholism 2002; 37 (6): 513–521.

CIWA-Ar Scale (CLINICAL INSTITUTE WITHDRAWAL ASSESSSMENT FOR ALCOHOL)

1. Nausea & Vomiting:
Ask "Do you feel sick to your stomach? Have you vomited?"
Observation
0 no nausea / vomiting
1
2
3
4 intermittent nausea with dry heaves
5
6
7 constant nausea, frequent dry heaves & vomiting

2. TREMOR:
Observation. Arms extended and fingers spread apart
0 no tremor
1 not visible, but can be felt fingertip to fingertip
2
3
4 moderate, with patients arm extended
5
6
7 severe, even with arms not extended

3. PAROXYSMAL SWEATS:
Observation
0 no sweat visible
1 barely perceptible sweating, palms moist
2
3
4 beads of sweat obvious on forehead
5
6
7 drenching sweats

4. ANXIETY:
Observation. Ask: "Do you feel nervous?"
0 no anxiety
1 mildly anxious
2
3
4 moderately anxious, or guarded, so anxiety is inferred
5
6
7 equivalent to acute panic as seen in severe delirium or acute schizophrenic reactions

5.Agitation:
Observation.
0 normal activity
1 somewhat more than normal activity
2
3
4 moderatedly fidgety and restless
5
6
7 paces back and forth during most of interview, or constantly thrashes about

6. Tactile Disturbances
Observation. Asic "have you any itching, pins and needles sensations, any burning, any numbness or do you feel bugs crawling on or under your skin?
0 none
1 very mild itching, pins and needles, burning or numbness.
2 mild itching, pins and needles, burning or numbness.
3 moderate pins and needles, burning or numbness.
4 moderately severe hallucinations
5 severe hallucinations
6 extremely severe hallucinations
7 continuous hallucinations

7. AUDITORY DISTURBANCES:
Observation. Asic "Are you more aware of sounds around you? Are they harsh? Do they frighten you? Are you hearing anything that is disturbing you? Are you hearing things you know are not there?
0 not present
1 very mild harshness or ability to frighten
2 mild harshness or ability to frighten
3 moderate harshness or ability to frighten
4 moderately severe hallucinations
5 severe hallucinations
6 extremely severe hallucinations
7 continuous hallucinations

8. VISUAL DISTURBANCES:
Observation. Ask: " Does the light appear to be too bright? Is its colour different? Does it hurt your eyes? Are you seeing anything that is disturbing you? Are you seeing things you know are not there?"
0 not present
1 very mild sensitivity
2 mild sensitivity
3 moderate sensitivity
4 moderately severe hallucinations
5 severe hallucinations
6 extremely severe hallucinations
7 continuous hallucinations

9. HEADACHE, FULLNESS IN HEAD:
Observation. Asic " Does your head feel different? Does it feel like there is a band around your head?" Do not rate for dizziness or lightheadedness.
0 not present
1 very mild
2 mild
3 moderate
4 moderately severe
5 severe
6 very severe
7 extremely severe

10. ORIENTATION & CLOUDING OF SENSORIUM:
Observation. Ask: "What day is this? Where are you? Who am I?"
0 orientated and can do serial additions
1 cannot do serial additions or is uncertain about date
2 disorientated for date by no more than 2 calendar days
3 disorientated for date by more than 2 calendar days
4 disorientated for place and / or person

PATIENT NAME & MRN:

Date & Time	1	2	3	4	5	6	7	8	9	10	CIWA Total	Signed

References : a) Saitz R, et. al. JAMA. 1994;272(7):519-523 ; b) Day E. Psychiatric Bulletin (2004) 28: 407-410; c) Harden R, Page AV. Emerg Med J 2005;22:805-806; d) Sullivan JT, Skykora K, Schneiderman J. Br J Addict 1989;84:1353-7 ; e) Heinälä P, Piepponen T, Heikkinen H. Int J Clin Pharmacol Ther Toxicol. 1990 May;28(5):211-7 ; f) Salloum IM, Cornelius JR, Daley DC, Thase ME. Psychopharmacol Bull. 1995;31(2):305-10; g) Thompson AD, Cook CCH, Touquet R, Henry J. Alcohol & Alcoholism 2002; 37 (6): 513–521.