ALCOHOL WITHDRAWAL

RECOGNITION AND ASSESSMENT

Alcohol withdrawal can be a presenting feature or occur as an unexplained development in a patient who has been admitted for other reasons and deprived of alcohol. Mild withdrawal begins some 6-8 hr after last drink, but may not be obvious until after 72 hr. Moderate–severe withdrawal occurs about 48 hr after last drink – untreated, it carries a 15% mortality rate

Symptoms and signs

If following features present, consider diagnosis of alcohol withdrawal:

- anxiety
- sweating
- tremor
- ataxia
- confusion
- frequent attendance at emergency services (e.g. with upper GI symptoms)

Assess severity using Clinical Institute Withdrawal Assessment of Alcohol Scale (revised CIWA-Ar) – form (example below) Ask specific questions shown for each category and use CIWA-Ar form to derive score from answers or observations

- Score <10 – mild withdrawal
- Score 10-20 – moderate withdrawal
- Score >20 – severe withdrawal

It is important to note that it is possible to develop a withdrawal state even while consuming large quantities of alcohol if there is a high degree of tolerance towards alcohol.

Detailed alcohol history

- Quantity
- Frequency of use
- Highest intake
- Previous treatment
- Previous abstinence
- Triggers for drinking
- Psychiatric problems
- Motivation

Investigations

- FBC
- U&E
- LFT, calcium, magnesium, phosphate, blood glucose
- Arterial blood gases (moderate–severe withdrawal)
- INR
- Consider Urine drug screen and blood alcohol level if diagnosis unclear

Differential diagnosis

- See **Acute confusional state (delirium) in older people** guideline
- See Alcoholic Hepatitis guidelines
- Withdrawal of intoxication with drug(s) of abuse

Example of Clinical Institute Withdrawal Assessment of Alcohol Scale (revised CIWA-Ar)

Patient:___________________________ Date:____/___/____ Time: _________ (24 hour clock, midnight = 00:00)

Pulse or heart rate, taken for one minute: ____________________ Blood Pressure: __________________

NAUSEA AND VOMITING – Ask 'Do you feel sick to your stomach
you vomited'?
Observation
0 no nausea and no vomiting
1 mild nausea with no vomiting
2
3
4 intermittent nausea with dry heaves
5
6
7 constant nausea, frequent dry heaves and vomiting

TACTILE DISTURBANCES – Ask 'Have you any itching, pins and needle
burning, any numbness,
or do you feel bugs crawling on or under your skin'?
Observation
0 none
1 very mild itching, pins and needles, burning or numbness
2 mild itching, pins and needles, burning or numbness
3 moderate itching, pins and needles, burning or numbness
4 moderately severe hallucinations
5 severe hallucinations
6 extremely severe hallucinations
7 continuous hallucinations

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

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

AUDITORY DISTURBANCES – Ask 'Are you more aware of sound
around you? Are they harsh? Do they frighten you?
Are you hearing anything that is disturbing to you?
Are you hearing things you know are not there'?
Observation
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

VISUAL DISTURBANCES – Ask 'Does the light appear to be too bright?
different? Does it hurt your eyes?
Are you seeing anything that is disturbing to you?
Are you seeing things you know are not there'?
Observation
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

ANXIETY – Ask 'Do you feel nervous'?
Observation
0 no anxiety, at ease
1 mild anxious
4 moderately anxious, or guarded, so anxiety is inferred
7 equivalent to acute panic states as seen in severe delirium or acute schizophrenic reactions

HEADACHE, FULLNESS IN HEAD
Ask; 'Does your head feel different? Does it feel like there is a band aroun
(Do not rate for dizziness or light-headedness)
Otherwise, rate severity
0 not present
1 mild
2 moderate
3 moderately severe
4 severe
5 very severe
6 extremely severe

AGITATION – Observation
0 normal activity
1 somewhat more than normal activity
4 moderately fidgety and restless
7 paces back and forth during most of the interview, or constantly thrashes about

ORIENTATION AND CLOUDING OF SENSORIUM
Ask; 'What day is this? Where are you? Who am I'?
0 oriented and can do serial additions
1 cannot do serial additions or is uncertain about date
2 disoriented for date by no more than 2 calendar days
3 disoriented for date by more than 2 calendar days
4 disoriented for place/or person

Total CIWA-Ar Score ___________ (Maximum Possible Score 67)

Rater's Initials ______________ Patients scoring less than 10 do not usually need additional medication for withdrawal

IMMEDIATE TREATMENT

- If alcohol withdrawal is mild and is the sole clinical problem, patient not elderly and there is no other reason to warrant admission to hospital, consider discharging patient. Only patients with moderate and severe withdrawal symptoms should need inpatient treatment

Mild withdrawal

- Reassurance and general support, medication for withdrawal may not be required
  Give oral Vitamin B Co Forte 2 tabs three times daily and thiamine 100 mg twice daily
- Encourage patient to seek help from GP.
- If medication for withdrawal is considered necessary then patient should be admitted since there are at present no facilities for urgent access to community detoxification.

Moderate and severe withdrawal

- Following clinical features warrant admission:
- CIWA-Ar score >10
- history of severe withdrawal or convulsions
- signs of Wernicke's encephalopathy (e.g. confusion, ataxia, nystagmus, ophthalmoplegia, neuropathy)
- other evidence of high risk (e.g. delirium tremens, convulsions, hallucinosis)
- psychiatric co-morbidity (e.g. depression, suicidal ideation)

In-patients (with moderate withdrawal)

- Give parenteral thiamine as Pabrinex IV high potency injection **one pair** of ampoules (mixed) by IV infusion in sodium chloride 0.9% (or glucose 5%) 100 mL over 10 min **once daily** for **first three days** of detoxification. If IV route not available, use IM route. Oral thiamine supplementation is unnecessary following IV treatment
- For in-patients who are not continuing to drink alcohol, give oral diazepam (or lorazepam if patient elderly or has either liver disease or COPD) using regimen in Table 1 as a guide

In-patients (with severe withdrawal)

- Give parenteral thiamine as Pabrinex IV High potency injection, **two pairs** of ampoules (mixed) by IV infusion in sodium chloride 0.9% (or glucose 5% but not for first dose) 100 mL over 10 min **three times daily for three days**
- Correct dehydration, electrolyte imbalance or hypoglycaemia (defer giving glucose until after first dose of thiamine as it can precipitate Wernicke's encephalopathy)
- If physical symptoms persist beyond three days, give **one pair** of ampoules (mixed) by IV infusion in sodium chloride 0.9% (or glucose 5%) 100 mL over 10 min **once daily** for as long as they continue. Oral thiamine supplementation is unnecessary following IV treatment
- For in-patients who are not continuing to drink alcohol, give oral diazepam (or lorazepam if patient elderly or has either liver disease or COPD) using regimen in Table 1 as a guide

MEDICATION FOR WITHDRAWAL

The aim is to prevent features of withdrawal without oversedation. Individual dose requirements vary considerably and can be decided only by assessing response regularly and omitting or adding doses as necessary.
Use Table 1 and notes below to guide treatment

Table 1: Diazepam and lorazepam reducing regimens for alcohol withdrawal

(DO NOT USE both Lorazepam and diazepam. Prescribe diazepam unless patient elderly, or has significant COPD or liver impairment, in which case use lorazepam)

Reduce dose of lorazepam by half in the elderly , but if not responding and not drowsy increase to full dose

	Diazepam	Lorazepam	Notes
Step 1	10 mg 6 hrly	1 mg 6 hrly	• **Normal starting point for severe withdrawal** • if symptoms still not controlled, use additional doses (see notes below)
Step 2	10 mg 8 hrly	1 mg 8 hrly	• **Normal starting point for moderate withdrawal and community detoxification** • if symptoms not controlled, move to step 1
Step 3	5 mg 6 hrly	500micrograms 6 hrly	• Withdrawal symptoms should be controlled so that additional benzodiazepine or hypnotics are not required
Step 4	5 mg 8 hrly	500micrograms 8 hrly	
Step 5	5 mg 12 hrly	500micrograms 12 hrly	
Step 6	5 mg once/day	500micrograms once/day	
Step 7	STOP TREATMENT		• If patient craving alcohol, consider acamprosate

Note;
1. Each step should last 2 days
2. Commence at step 1 for severe withdrawal or step 2 if moderate withdrawal
3. If patient not controlled when commenced at step 2 move up to step 1
4. If patient not progressing as expected between other steps, reduce dosage more slowly; reassess withdrawal symptoms and seek advice from medical SpR
5. If additional medication required at step 1, give extra doses of:
   diazepam up to 20 mg in 24 hr, (giving maximum total daily dosage of 60 mg) or
   lorazepam up to 2 mg in 24 hr, (giving maximum total daily dosage of 6 mg)
7. If higher dose of medication required at step 1 stepwise reduction (every 2 days) should start from the higher dosage, lengthening the detoxification process

(state lorazepam dose in micrograms i.e. 500micrograms)

If maximum recommended dosages do not control symptoms, seek advice from medical SpR on call

8. For patients unable to swallow or where oral route not practical, give lorazepam by slow IV injection over 3-5 min into a large vein or IM (diluted 1:1 with sodium chloride 0.9%) at doses suggested above. Change to oral route (and to diazepam if appropriate) at earliest opportunity
9. For treatment of seizures – see **Status epilepticus** guideline

SUBSEQUENT MANAGEMENT

- Patients with a diagnosis of Wernicke's encephalopathy, who have shown response to treatment but have enduring ataxia, polyneuritis or memory disturbance, should continue with daily infusions of Pabrinex for as long as physical symptoms persist
- Withdrawal seizures alone do not signify epilepsy and maintenance anticonvulsant therapy is unnecessary
- Take alcohol history if not possible to do so earlier

MONITORING TREATMENT

- Blood glucose (2 hrly if drowsy, confused or concern about previous readings)
- Use CIWA-Ar scale 6 hrly to assess level of withdrawal