Alcohol Withdrawal

Disclaimer

Contents

Red flags 2

Assessment 2

Practice Point 2

Alcohol consumption 2

Factors associated with risk of developing withdrawal symptoms 2

Withdrawal behaviour 3

Complications 3

Motivation to change 3

Withdrawal symptoms and signs 3

Management 4

Withdrawal process and treatment options 4

Environment for detoxification 5

Thiamine[1] 5

Diazepam regimen for ambulatory alcohol withdrawal 6

Symptomatic treatment for alcohol withdrawal 6

Daily monitoring 7

Relapse prevention medications 7

Referral 9

Information 9

For health professionals 9

For patients 10

Sources 10

Red flags

- Alcohol withdrawal seizures
- Alcohol withdrawal delirium (delirium tremens)

Assessment

Practice Point

Re-assess motivation

Re-assess motivation to change at each consultation. Problematic substance use often challenges the willingness and capacity to change.

1. If patient is intoxicated, ensure their immediate safety and arrange follow-up for assessment when not intoxicated to avoid poor quality of assessment.

2. Take a history:

Alcohol consumption

Alcohol consumption

Ask:

- *How much do you drink on a typical day?*
- *How often do you drink? Amount per day? Days per week? Weeks per month?*

Record consumption in millilitres of alcohol, using the standard drink sizes guide.

Factors associated with risk of developing withdrawal symptoms

Factors associated with risk of developing withdrawal symptoms

- *Past history of severe alcohol withdrawal syndrome, e.g. severe anxiety, seizures, delirium, hallucinations.*
- *Duration of heavy alcohol use for ≥ 6 years.*
- *Drinking > 80 g alcohol per day on a regular basis, e.g. > 8 standard drinks.*
- *Early morning drinking to alleviate withdrawal symptoms.*
- *Blood-alcohol level of > 0.2% on presentation without signs of intoxication.*
- *Concomitant use of other drugs, especially benzodiazepines.*
- *Presence of concomitant medical conditions, e.g. epilepsy, severe hepatic disease, head injury, or psychiatric conditions, e.g. anxiety, psychosis, or depression.*
- *Inter-current condition that is causing tissue hypoxia, severe pain or other stress, e.g. pneumonia or shock.*
- *Recent or imminent general anaesthetic.*
- *Elderly*

Withdrawal behaviour

Withdrawal behaviour

If alcohol withdrawal is suspected or likely, ask:

- *When did they last have any alcohol to drink?*
- *What are they usually like when they stop drinking, e.g. any tremors, seizures, delirium, or withdrawal requiring hospitalisation?*

If the patient has never tried stopping, ask what are they like in the morning before their first drink?

Complications

Complications

- *Consider poly-drug use, especially benzodiazepine use as it may complicate withdrawal management.*
- *Identify social supports and barriers that may influence withdrawal management.*
- *Consider current unstable mental illness and physical health issues, e.g. insulin-dependent diabetes, epilepsy, acute pain conditions, respiratory illness.*
- *Identify preferences and expectations around withdrawal management, e.g. home, hospital or detox unit.*

Motivation to change

– use motivational interviewing techniques

3. Perform a physical examination:

    - Note patients mental state
    - Look for ***withdrawal symptoms and signs.***

Withdrawal symptoms and signs

Onset of symptoms is usually 6 to 24 hours after the last drink.

	Autonomic overactivity	***Gastrointestinal***	***Cognitive and perceptual changes***
Minor	• *Sweating* • *Fever* • *Tachycardia* • *Hypertension* • *Insomnia* • *Tremor – fine*	• *Anorexia* • *Dyspepsia* • *Nausea* • *Vomiting*	• *Anxiety* • *Agitation* • *Vivid dreams* • *Tactile disturbance* • *Headache*

Major	• *Raised or fluctuating blood pressure* • *Electrolyte disturbance* • *Tremor – at rest or coarse* • *Seizures – single episode of generalised, tonic- clonic in the first 24 hours*		• *Hallucinations* • *Delirium and/or confusion* • *Delusions* • *Formication e.g., electric, ants* • *Wernicke encephalopathy*

Seizures: *Alcohol withdrawal seizures affect about 5% of dependent drinkers, usually occur 7 to 24 hours after their last drink, are typically generalised, tonic-clonic, and occur as a single episode.*

Delirium: *Alcohol withdrawal delirium (delirium tremens) is the most severe form of alcohol withdrawal and is a medical emergency.*

Indicators of alcohol withdrawal delirium*:*

- *Gross tremor*
- *Autonomic instability – causing sudden, unpredictable lack of control of heart rate, blood pressure, and temperature*
- *Extreme agitation or restlessness*
- *Confusion and disorientation*
- *Paranoid ideation*
- *Accentuated response to external stimuli*
- *Hallucinations affecting the senses, typically visual*

4. Consider FBE and LFTs to investigate signs of alcoholic hepatitis and anaemia.

Management

1. If red flags, refer to the Emergency Department.

2. Discuss ***withdrawal process and treatment options*** with patient.

Withdrawal process and treatment options

- *Acute withdrawal symptoms usually resolve within 5 to 7 days. Subacute withdrawal symptoms can persist for months, e.g. cravings, insomnia.*
- *Discuss risks associated with using other drugs during withdrawal.*
- *Treatment involves withdrawal management and continuing care to support relapse prevention.*
- *Treatment requirements and options:*

	Ambulatory	***Inpatient***
Expected withdrawal symptom severity	• *Mild or moderate*	• *Major*
Treatment	• *Daily review for at least a week:* • *General Practitioner on days 1 and 3*	• *Hospital admission (≤ 7 days)* • *Pharmacological treatment*

	• *Detoxification nurse on all other days* • *Pharmacological treatment*	• *Option to transition into residential rehabilitation programs*
Factors to consider	• *No complicating medical, psychological, or psychiatric factors*	• *Complicating medical (including pregnancy and seizures), psychological or psychiatric factors*
	• *Supportive home environment*	• *Limited or no support*
	• *No other significant substance use*	• *•May have significant use of other drugs*
Continuing care	• *Counselling* • *Pharmacotherapy* *Home or community-based rehabilitation*	• *Counselling* • *Pharmacotherapy* *Home or community-based rehabilitation*

3. Consider most suitable ***environment for detoxification.***

Environment for detoxification

- *Environment needs to be comfortable and quiet with minimal external stimuli and dim lighting.*
- *Where there are minimal risks and support or supervision is available, home detoxification may be suitable.*
- *Inpatient detoxification should be considered:*
  - *if there are medical comorbidities or possible complications.*
  - *if the home environment is unsafe or there is no support available.*
  - *during pregnancy. Contact ReGen on* ***(03) 9497-1122*** *to consider admission.*
  - *where there is regular or heavy use of other drugs, e.g. benzodiazepines.*
  - *if there are expected or past severe withdrawal symptoms, e.g. alcohol withdrawal seizures.*

4. Give all patients ***thiamine*** to prevent Wernicke's encephalopathy.

Thiamine[1]

Always give thiamine before administering glucose to prevent precipitation of Wernicke's encephalopathy.

Alcohol withdrawal presentation	***Thiamine dose***
Non-nutritionally deficient alcohol dependent patient with no signs of Wernicke-Korsakoff syndrome	• *200 to 300 mg IM in divided doses daily for 3 days* • *100 mg orally or IM daily after day 5*
Alcohol dependent patient with risk factors for thiamine deficiency	• *300 mg IV or IM for 3 to 5 days* • *Then 300 mg orally daily*
Suspected Wernicke-Korsakoff syndrome	• *At least 500 mg (< 900 mg) daily IV or IM for 3 to 5 days or until symptoms subside* • *Then 300 mg orally daily*

Initial doses of thiamine should be given prior to carbohydrate load e.g. dextrose infusions.

5. If medication is required for withdrawal symptoms, generally give ***diazepam*** unless patient has signs of severe liver disease – for these patients, seek specialist advice as hospitalisation may be preferred.

Diazepam regimen for ambulatory alcohol withdrawal

- *Dosing regimen should be individualised and options include:*
  - *Symptom-triggered dosing*
  - *Fixed dose tapering schedule*
  - *Loading dose with or without ongoing fixed dose tapering or symptom-triggered dosing (inpatient)*
  - *Example of fixed dose tapering schedule*
    - *Day 1: 5 to 15 mg four times a day*
    - *Day 2: 5 to 10 mg four times a day*
    - *Day 3: 5 to 10 mg three times a day*
    - *Day 4: 10 mg twice a day*
    - *Day 5: 5 mg twice a day*
  - *Tapering doses may be required over the next 1 to 2 days*
  - *Do not continue beyond 1 week due to risk of patient developing dependence.*
- *Lower doses may be required for some patients e.g., elderly, frail.*
- *Patient should be seen daily by prescribing general practitioner or supporting drug and alcohol worker and provided with only 1 day's supply at a time.*
- *Script should be for quantities expected to be required by patient, not necessarily full PBS quantity.*
- *Contraindications:*
  - *respiratory failure*
  - *significant liver impairment*
  - *possible head injury*
  - *cerebrovascular injury*

Specialist consultation is essential for these patients.

6. Provide ***symptomatic treatment*** for headache, nausea, vomiting, or diarrhoea as needed.

Symptomatic treatment for alcohol withdrawal

Symptom	Medication	Dose
Nausea and vomiting	*Metoclopramide*	*10 mg every four to six hours, not exceeding 30 mg in 24 hours. Reduce dose rate to every eight hours as symptoms abate.*
	Prochlorperazine	*12.5 mg every four to six hours (oral or intramuscular). Reduce dose rate to every eight hours as symptoms abate.*
Diarrhoea	*Loperamide*	*4 mg as a first dose, then 2 mg after each loose stool, to a maximum of 16 mg per day.*
Headache	*Paracetamol*	*500 to 1000 mg every four to six hours, to a maximum of 4 g per day.*

7. Encourage appropriate fluid intake and monitor carefully for signs of dehydration.

8. Provide ***daily monitoring*** in general practice.

Daily monitoring

- *Patient progress – Have they ceased drinking?*
- *Compliance with medications*
- *Temperature, pulse rate, and blood pressure*
- *Level of hydration*
- *Mental state and suicide risk*

9. Discuss:
    - when the patient should make contact with the general practitioner or emergency services.
    - strategies for managing the withdrawal and prevention:
        - Relaxation and distraction techniques
        - Anxiety management
        - Sleep hygiene
        - Stress management
        - Healthy lifestyle choices e.g., nutrition, rest, exercise

10. Consider offering ***relapse prevention medications.***

Relapse prevention medications

- *Treatment duration for all relapse prevention medications is ≥ 6 months.*
- *Choice of drug needs to be individualised:*
    - *Naltrexone reduces rate of relapse and increases number of abstinence days. Well tolerated, once daily dosing. Blocks the effects of opioid analgesia.*
    - *Acamprosate will not interfere with pain relief but is hard to achieve compliance with, due to 3 times daily dosing.*
    - *Disulfiram (Antabuse) is no longer widely used due to lack of effects on cravings, difficulties with compliance and dangers associated with concomitant alcohol use.*
    - *Other agents such as baclofen, anticonvulsants, and ondansetron are showing promising evidence, but their use is off-label and specialist advice is suggested.*

Medication	*Mode of Action*	*Contraindications*	*Dosage*	*PBS availability*
Naltrexone (Vivitrol, Revia)	*Blocks effects of endogenous opiates released during alcohol consumption, which reduces the pleasurable effect and possibly reduces alcohol cravings.*	*Current or recent use of opioid medication. Patients who suffer from depression should be monitored closely. Acute hepatitis or liver failure.*	*50 mg daily (one tablet).* *Can be started early in withdrawal.* *Consider starting with ½ tablet daily for 1 to 2 days to reduce side-effects.*	*Phone authority for alcohol dependence as part of a comprehensive treatment program with the goal of maintaining abstinence.*
Acamprosate (Campral)	*Reduces neuronal hyperexcitability characteristic of alcohol withdrawal. Not effective in the acute phase but reduces symptoms of protracted alcohol withdrawal e.g., anxiety, irritability, insomnia, craving.*	*Pregnancy or breastfeeding.* *Renally cleared. Do not use if serum creatinine is > 120 micromole/L.*	*Initiate approximately 1 week after cessation of drinking.* *Patients weighing ≥ 60 kg: 666 mg, three times per day.* *Patients weighing < 60 kg: 666 mg in the morning, 333 mg at midday, and 333 mg at night.*	*Streamlined authority for alcohol dependence as part of a comprehensive treatment program with the goal of maintaining abstinence.*
Disulfiram (Antabuse)	*Interacts with alcohol causing unpleasant and sometimes dangerous effects.*	*Significant medical conditions.* *Concerns about compliance.*	*100 mg per day initially.* *Maximum of 300 mg per day.*	*Not PBS listed.*
Baclofen	*Muscle relaxant. Showing promise in medium to long term relapse prevention.*	*Seek specialist advice.*	*Seek specialist advice.*	*Off-label, therefore not available on PBS.*

11. Offer to refer all patients for management, counselling, and support to either of:
    - ➢ Low risk alcohol and drug treatment assessment
    - ➢ Moderate to high risk alcohol and drug treatment assessment

12. If patient has co-morbid mental health condition and is opposed to seeing a drug and alcohol service, consider referral to adult psychological therapies.

13. Consider seeking advice:
    - ➢ If patient is pregnant, contact the Women's Alcohol and Drug Service.
    - ➢ If requiring advice regarding management of patients, phone Drug and Alcohol Clinical Advisory Service (DACAS) on **1800 812 804.**

Referral

- If red flags, refer to the Emergency Department.
- Offer to refer all patients for management, counselling, and support to either of:
    - Low risk alcohol and drug treatment assessment
    - Moderate to high risk alcohol and drug treatment assessment
- If patient has co-morbid mental health condition and is opposed to seeing a drug and alcohol service, consider referral to adult psychological therapies.
- Consider seeking advice:
    - If patient is pregnant, contact the Women's Alcohol and Drug Service or ReGen on (03) 9479 1122 to consider admission.
    - If requiring advice regarding management of patients, phone Drug and Alcohol Clinical Advisory Service (DACAS) on 1800-812-804.

Information

For health professionals

Further information

- ➢ Australian Government Department of Health and Ageing – Guidelines for the Treatment of Alcohol Problems
- ➢ DACAS – Clinical Resources
- ➢ NSW Department of Health – Drug and Alcohol Withdrawal Clinical Practice Guidelines
- ➢ Turning Point – Alcohol and Drug Withdrawal Guidelines

For patients

- Department of Health and Ageing – Reduce Your Risk: New National Guidelines for Alcohol Consumption
- Hello Sunday Morning
- ReachOut – Alcohol [for young people]

Sources

References

1. Manning V, Arunogiri S, Frei M, Ridley K, Mroz K, Campbell S, Lubman D. Alcohol and other Drug Withdrawal: Practice Guidelines. 3rd ed. Richmond, Victoria: Turning Point Alcohol and Drug Centre; 2018.

Last Reviewed: April 2019

Disclaimer