

Alcohol Use Disorder: Assessment, Acute Withdrawal Management and Long-Term Pharmacotherapy

This in-depth resource provides guidelines for the management of alcohol use disorder (AUD). It covers the critical phases of patient care. It also:

- Outlines the structured assessment tools necessary to evaluate withdrawal severity.
- Details the use of pharmacological agents for acute alcohol withdrawal.
- Summarizes the available medications for long-term recovery and relapse prevention.

Alcohol Withdrawal Assessment

Accurate and timely assessment of alcohol withdrawal syndrome (AWS) is important. It allows clinicians to effectively:

- Evaluate the severity of withdrawal symptoms.
- Stratify a patient's risk for complicated withdrawal (e.g., seizures or delirium tremens).
- Determine the appropriate level of care.

1. Initial Screening

- a. Conduct patient history and physical exam
- b. Tool: The Prediction of Alcohol Withdrawal Severity Scale (PAWSS) screens for complicated withdrawal risk
 - i. A score ≥ 4 = high risk of seizures/delirium tremens (DTs)
 - ii. A score < 4 = low risk of complicated withdrawal
- a. Timing of symptoms:
 - i. Onset: 6–24 hours after last drink
 - ii. Peak: ~72 hours
 - iii. Resolution: Day 5–7 of abstinence

2. Severity Quantification

- a. Assess current physiological and psychological symptoms
 - i. Vital Signs: Used to detect markers of autonomic hyperactivity
 - ii. Mental Status Exam: Used to detect early disorientation or clouding of consciousness
 - iii. Laboratory Testing: Complete Blood Count (CBC), electrolytes, liver function tests, blood alcohol concentration (BAC), urine drug screen (to rule-out other substances)

- b. Tool: The Clinical Institute Withdrawal Assessment of Alcohol Scale – Revised (CIWA-Ar)
 - i. A mild score < 8: Minimal symptoms (mild tremor, slight anxiety)
 - ii. A moderate score 8–15: Clear physical signs (nausea, sweat, visible tremor)
 - iii. A severe score of > 15: Significant distress (agitation, hallucinations, severe autonomic hyperactivity)

3. Disposition and Monitoring

- a. Determine level of care (inpatient vs outpatient) based on the risk (PAWSS) and severity (CIWA/ Physical Exam) combined.
 - i. Outpatient management is generally reserved for patients presenting with mild-to-moderate symptoms who lack high-risk clinical features. These individuals must have a safe, stable home environment and are typically monitored via daily visits for up to five days to ensure safety and progress.
 - ii. Inpatient admission is indicated for patients with severe symptoms (such as a CIWA-Ar score > 15), a documented history of withdrawal seizures or Delirium Tremens (DTs), or concurrent medical and psychiatric illnesses. Inpatient care is also necessary for those lacking adequate social support. Once admitted, monitoring is more intensive, with CIWA-Ar assessments performed every 4–6 hours; such frequent reassessment is vital for the early detection of progression into severe or life-threatening withdrawal.

Long-Term Management

Pharmacotherapy is a vital part of long-term management for AUD. It is used to maintain abstinence, reduce craving, and decrease the incidence of heavy drinking. This table details the evidence-based, FDA-approved medications (Naltrexone, Acamprosate, Disulfiram) and a common off-label agent (Gabapentin). It outlines their mechanisms, required dosing, side effect profiles, and necessary monitoring to guide clinicians in how to select the most appropriate agent for each patient.

Long-Term Management					
Medication	Indication	Dose	Common Side Effects	Monitoring	Clinical Considerations
Acamprosate	Acamprosate Maintenance of abstinence, reduction of heavy drinking	666 mg three times daily (>60kg) 666 mg twice daily (<60kg)	Diarrhea, nausea, flatulence, depression, anxiety, weakness, dizziness, insomnia, dry mouth, paresthesia, pruritus, sweating.	Creatinine and creatinine clearance periodically Annual eGFR, Quarterly eGFR if eGFR is 30-50mL/min	Second-line; not contraindicated in liver disease; contraindicated if CrCl <30 mL/min
Disulfiram	250-500 mg daily for 1-2 weeks, then 250 mg daily maintenance	250-500 mg daily for 1-2 weeks, then 250 mg daily maintenance	Disulfiram reaction if alcohol consumed*, hepatotoxicity, metallic taste, dermatitis	Creatinine, creatinine clearance, and liver enzymes periodically	Limited effectiveness data; requires abstinence before starting; induces vomiting with alcohol

Long-Term Management					
Medication	Indication	Dose	Common Side Effects	Monitoring	Clinical Considerations
Gabapentin	Reduction of drinking (off-label)	300 mg daily, increase by 300 mg to max 900-1800 mg daily in 3 divided doses	Dizziness, sedation, ataxia	Creatinine and creatinine clearance periodically, Weight gain and somnolence	Off-label; may benefit patients with chronic pain; limited effectiveness data
Naltrexone (oral)	Maintenance of abstinence, reduction of heavy drinking	50 mg once daily	Nausea, vomiting, anorexia headache, fatigue, insomnia, anxiety, dizziness; low risk of hepatotoxicity	Liver enzymes every 6 months	First-line medication; contraindicated with cirrhosis, acute hepatitis, or opioid use
Naltrexone (Long-acting injectable formulation)	Maintenance of abstinence, reduction of heavy drinking	380 mg IM every 4 weeks	Injection-site reaction, nausea, headache, dizziness; low risk of hepatotoxicity	Liver enzymes every 6 months	Improved adherence; reduced drinking days by 5 over 30 days; contraindicated with cirrhosis, acute hepatitis, or opioid use

*Concomitant alcohol consumption during disulfiram therapy induces a disulfiram-ethanol reaction due to acetaldehyde accumulation, resulting in flushing, headache, nausea, vomiting, tachycardia, hypotension, and respiratory distress. This reaction may occur within 12–24 hours of alcohol ingestion and can persist for up to 14 days after discontinuation of disulfiram.

References

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