Inpatient Management of Alcohol Withdrawal

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KEYWORDS

• Alcohol withdrawal • Inpatient management • Alcohol abuse
• Alcohol dependence

HOSPITAL MEDICINE CLINICS CHECKLIST

1. Recognize the differences in terms used to describe maladaptive alcohol consumption. Alcohol abuse is less severe than alcohol dependence, but alcohol withdrawal can occur in patients in both groups.
2. Focus history-taking questions about consumption and dependence to best identify patients at risk for alcohol withdrawal. For those patients with a less-clear history, there are several validated alcohol questionnaires to choose from.
3. Screen every patient for alcohol use disorders given that the prevalence of alcohol use disorder among medical inpatients is suspected to be as high as 17% (1:5 or 1:6).
4. Understand there are more than 30 signs and symptoms of alcohol withdrawal, which are divided into early withdrawal (first 48 hours after cessation of drinking) and late withdrawal (>48 hours).
5. Recognize that early withdrawal consists of symptoms from enhanced central nervous system (CNS) stimulation, including alcoholic hallucinations and seizures.
6. Recognize that late withdrawal consists of delirium tremens and Wernicke encephalopathy.
7. Use elevated blood alcohol levels to identify tolerance, which helps predict who is at risk for alcohol withdrawal. The actual level itself is not as helpful because withdrawal symptoms can occur at any blood alcohol level.
8. Frequently evaluate patients at risk for signs and symptoms of withdrawal.

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9. Use a single benzodiazepine for treatment and monitor carefully for side effects, including oversedation, respiratory depression, aspiration risk, and deconditioning.
10. Realize that although many hospitals use a Clinical Institute Withdrawal Assessment Scale (CIWA-AR) protocol, it has never been validated in hospitalized patients with concurrent illness or those with comorbidities.
11. Recognize that many of the signs and symptoms of alcohol withdrawal can come from other acute illnesses, especially abnormal vital signs.
12. Treat alcoholic withdrawal seizures with lorazepam.
13. Use benzodiazepines for delirium tremens judiciously. The recommendation to use benzodiazepines for delirium tremens and dose for light somnolence is based on expert opinion only. The ideal treatment regimen is not known.

DEFINITIONS

1. How are alcohol abuse and dependence defined?

It is estimated that 67% of American adults drink alcohol.[1] In fact, observational studies suggest light to moderate alcohol consumption is associated with benefits, such as reduction in coronary heart disease and mortality.[2] So when is drinking considered a problem? There are many terms used to describe maladaptive alcohol consumption: alcohol use disorder (AUD), alcohol abuse, alcohol dependence, and alcoholism. National society definitions vary slightly but most use behaviors, consequences, and time as key elements.

The Joint Committee on the National Council on Alcoholism and Drug Dependence and the American Society of Addiction Medicine created a consensus statement on the definition of alcoholism in 1992. They call *alcoholism* "a primary, chronic disease with genetic, psychosocial, and environmental factors influencing its development and manifestations. It is often progressive and fatal. It is characterized by continuous or periodic impaired control over drinking, preoccupation with the drug alcohol, use of alcohol despite adverse consequences, and distortion of thinking, most notably denial."[3]

The *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition, Text Revision (DSM-IV-TR) from the American Psychiatric Association uses the term AUD and divides it into 2 components: (1) alcohol abuse and (2) alcohol dependence.[4] It defines them as

Alcohol abuse (1 or more criteria for >1 year)

1. Failure to fulfill obligations (work or home)
2. Intoxication while driving or other risky situations
3. Legal problems related to alcohol
4. Social or personal problems caused by alcohol.

Alcohol dependence (3 criteria over >1 year)

1. Increasing tolerance to alcohol
2. Alcohol withdrawal
3. Drinking more than intended
4. Persistent desire to cut down or control
5. Excessive time either obtaining or getting over alcohol