Alcohol Withdrawal Management

Introduction

Affecting all age-groups, from preadolescents to older adults, alcohol is one of the most commonly abused drugs in the United States. Alcohol withdrawal can occur as a result of stopping alcohol intake because of factors such as the unavailability of alcohol, hospital admission for another purpose, or a planned detoxification process.

Although it may be difficult to predict alcohol withdrawal if the patient chooses to keep accurate information regarding alcohol use from health care workers, screening for alcohol use or abuse should be part of admission to any facility. Physical assessment findings as well as assessment tools such as the CAGE tool may help identify the patient with an alcohol problem and predict possible withdrawal. (See *The CAGE tool*.)

THE CAGE TOOL

CAGE is a simple tool for monitoring alcohol abuse. The patient is asked these four questions:

- 1. Have you ever felt the need to Cut down on your drinking?
- 2. Have you ever felt Annoyed by someone criticizing your drinking?
- 3. Have you ever felt Guilty about your drinking?
- 4. Have you ever felt the need for an Eye opener (a drink at the beginning of the day)?

One point is assigned for each "yes" answer. A score of two or more points may indicate a problem with alcohol.

Reprinted with permission from Ewing, J.A. (1984). Detecting alcoholism: The CAGE questionnaire. *Journal of the American Medical Association*, 252, 1902-1907.

Signs and symptoms of alcohol withdrawal—which can begin within 6 hours after drinking has stopped and last for 5 to 7 days—may vary. The patient initially experiences anorexia, nausea, anxiety, fever, insomnia, diaphoresis, and tremor, progressing to severe tremulousness (alcohol withdrawal delirium), agitation, and possibly, hallucinations and violent behavior. Major motor seizures (alcohol withdrawal seizures) can also occur. (See Signs and symptoms of alcohol withdrawal and Diagnostic criteria for alcohol withdrawal.)

SIGNS AND SYMPOTOMS OF ALCOHOL WITHDRAWAL

Alcohol withdrawal signs and symptoms may vary in degree from mild (morning hangover) to severe (alcohol withdrawal delirium). Formerly know as delirium tremens, alcohol withdrawal delirium is marked by acute distress following abrupt withdrawal after prolonged or massive use.

	Signs and symptoms	Mild	Moderate	Severe
1.	Anxiety	Mild restlessness	Obvious motor restlessness and anxiety	Extreme restlessness and agitation with intense fearfulness
2.	Appetite	Impaired appetite	Marked anorexia	Rejection of all food and fluid except alcohol

3.	Blood pressure	Normal elevated pressure	or slightly systolic	Usually elevated systolic pressure	Elevated systolic and diastolic pressures
4.	Confusion	None		Variable	Marked confusion and disorientation
5.	GI symptoms	Nausea		Nausea and vomiting	Dry heaves and vomiting
6.	Hallucinations	None		Vague, transient visual and auditory hallucinations and illusions (commonly nocturnal)	Visual and occasionally auditory hallucinations, usually of fearful or threatening content; misidentification of people and frightening delusions related to hallucinatory experiences
7.	Seizures	None		Possible	Common
8.	Sleep disturbance	Restless insomnia	sleep or	Marked insomnia and nightmares	Total wakefulness
9.	Sweating	Slight		Obvious	Marked hyperhidrosis

If chronic alcohol use is known, use of the Revised Clinical Institute Withdrawal Assessment for Alcohol (CIWA-Ar) may help predict the severity of withdrawal

DIAGNOSTIC CRITERIA FOR ALCOHOL WITHDRAWAL

Criteria for alcohol withdrawal are:

A. Cessation of (or reduction in) alcohol use that has been heavy and prolonged.

B. Two (or more) of the following, developing within several hours to a few days after criteria A:

1. autonomic hyperactivity, such as sweating or pulse rate greater than 100 beats/minute

- 2. increased hand tremor
- 3. insomnia
- 4. nausea or vomiting
- 5. transient visual, tactile, or auditory hallucinations or illusions
- 6. psychomotor agitation
- 7. anxiety
- 8. grand mal seizure.

C. The symptoms in criteria B cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

D. The symptoms aren't due to a general medical condition and aren't better accounted for by another mental disorder.

Reprinted with permission from *Diagnostic and Statistical Manual of Mental Disorders*, text revision, 4th ed. Washington, D.C.: American Psychiatric Association. 2000.

Asst. Prof. Arnel Banaga Salgado, Ed.D., D.Sc., RN

symptoms. This tool, an 8-item scale that's based on the original 15-item Clinical Institute Withdrawal Assessment-Alcohol Scale, can also be used to evaluate treatment. The primary goals of managing the patient with alcohol withdrawal are to maintain airway, breathing and circulation, and patient safety. Supportive measures should be provided as indicated by the patient's condition. After resolution of withdrawal symptoms, consideration should be given to treating alcohol dependence, depending on the stability of the patient's condition.

Equipment

- Admission history and physical forms
- CIWA-Ar scale (if used by your facility)
- Prescribed medication, as ordered
- Automatic blood pressure monitor
- Emergency resuscitative equipment
- Optional: restraints

Implementation

- Confirm the patient's identity using two patient identifiers according to your facility's policy.⁹
- Perform an admission physical and history per facility policy. If the patient admits to chronic alcohol use or is exhibiting signs and symptoms of alcohol withdrawal, complete the CIWA-Ar scale, if used by your facility, *to determine whether the patient is likely to experience withdrawal*.

◆ *Elder alert:* Remember to consider the possibility of alcohol abuse when evaluating older patients. Research suggests that alcoholism affects 2% to 10% of adults older than age 60. More than one-half of all elderly hospital admissions involve alcohol-related problems. ◆

- 1. Assess the patient for signs of inadequate nutrition and dehydration. Provide nutrition and fluids, as ordered. Obtain a nutritional consult *to ensure appropriate nutritional needs are met*.
- 2. If the patient is exhibiting signs and symptoms of alcohol withdrawal, administer prescribed medications as ordered and note the patient's response to treatment.
- 3. During acute withdrawal, carefully monitor the patient's mental status, heart rate, respiratory rate, blood pressure, and temperature every 30 minutes to 2 hours *to detect any complications*.
- 4. If the patient isn't exhibiting signs and symptoms of alcohol withdrawal, but it's suspected that it may occur based on the patient's history, monitor vital signs and mental status frequently. Give medications as ordered and note the patient's response to treatment.
- 5. Provide safety measures, as needed, *to prevent injury to the patient or health care team.* If the patient is exhibiting aggressive behavior that isn't controlled by medication, apply soft wrist restraints, per facility policy. (See the "Limb restraint application" procedure.)

- 6. Use a nonthreatening manner when performing care. Limit eye contact. Even if the patient is verbally abusive, listen attentively and respond with empathy *to communicate compassion*.
- 7. Provide supportive care based on the patient's overall condition. Severe withdrawal may require endotracheal intubation with ventilation support in order to provide adequate ventilation. The patient may also need cardiac monitoring, close liver and kidney evaluation, assessments for complications such as GI bleeding, electrolyte imbalances, and pancreatitis.
- 8. After withdrawal, or as part of a detoxification program, refer the patient to Alcoholics Anonymous (AA) to provide support for abstaining from continued alcohol use. About 40% of AA's members stay sober as long as 5 years, and 30% stay sober longer than 5 years.
- 9. Document the procedure. \square

Special Considerations

- The severity of withdrawal signs and symptoms is related to the degree of alcohol abuse and may also be affected by the physical complications already caused by chronic alcohol use.
- A patient admitted with symptoms of hallucinations and delusions should be ruled out for substance withdrawal in order to receive proper treatment. After proper evaluation and treatment of any withdrawal event, further evaluation and treatment of a psychiatric disorder can occur.
- If the patient is experiencing seizures, maintain an open airway. Provide airway protection and ventilation as needed. Initiate seizure precautions.
- If the patient is vomiting, institute aspiration precautions. Keep the patient on nothingby-mouth status.
- Restraints should only be applied as a last resort *to ensure patient or health care personnel safety* and should be removed as soon as safely possible. If needed and available, use one-on-one care instead of restraints *to help keep the patient safe*.
- Refer the spouse of an alcoholic to Al-Anon and children of an alcoholic to Alateen. By participating in these self-help groups, family members learn to relinquish responsibility for the individual's drinking.

Complications

Alcohol withdrawal may cause patient injury if the seizures occur or if the patient acts inappropriately or uncontrollably during the acute phase. More severe complications may occur if the patient has airway loss, aspiration, metabolic acidosis, or cardiac complications that aren't immediately recognized or treated. The patient may also experience complications related to alcohol use. (See *Complications of alcohol use*.)

COMPLICATIONS OF ALCOHOL USE

Alcohol can damage body tissues as a result of its direct irritating effects, changes that take place in

the body during its metabolism, aggravation of existing disease, accidents occurring during intoxication, and interactions with drugs. Such tissue damage can cause these complications.

Cardiopulmonary complications

- Cardiac arrhythmias
- Cardiomyopathy
- Chronic obstructive pulmonary disease
- Essential hypertension
- Increased risk of tuberculosis
- Pneumonia

GI complications

- Chronic diarrhea
- Esophageal cancer
- Esophageal varices
- Esophagitis
- Gastric ulcers
- GI bleeding
- Malabsorption
- Pancreatitis

Hematologic complications

- Anemia
- Leukopenia
- Reduced number of phagocytes

Hepatic complications

- Alcoholic hepatitis
- Cirrhosis
- Fatty liver

Neurologic complications

- Alcoholic dementia
- Alcoholic hallucinosis
- Alcohol withdrawal delirium

- Korsakoff's syndrome
- Peripheral neuropathy
- Seizure disorders
- Subdural hematoma
- Wernicke's encephalopathy

Psychiatric complications

- Amotivational syndrome
- Depression
- Fetal alcohol syndrome
- Impaired social and occupational functioning
- Multiple substance abuse
- Suicide

Other complications

- Beriberi
- Hypoglycemia
- Infertility
- Leg and foot ulcers
- Impaired respiratory diffusion
- Increased incidence of pulmonary infections
- Myopathies
- Prostatitis
- Sexual performance difficulties

Documentation

Record vital signs and other assessment findings, including those regarding patient behavior. If the CIWA-Ar is used, record the patient's initial score and any follow-up scores to track treatment. Document any medication given and the patient's response. Monitor and record any complications that occur and the treatment provided. If restraints are used, follow facility policy for documentation. Create and update the multidisciplinary care plan as needed.

References

- American Psychiatric Association (May 5, 2006). "American Psychiatric Association Practice Guidelines: Treatment of Patients With Substance Use Disorders, Second Edition," [Online]. Available at: <u>http://www.psychiatryonline.com/pracGuide/pracGuideChapToc_5.aspx</u> [May 3, 2010].
- 2. Ait-Daoud, N., et al. "An Overview of Medications for the Treatment of Alcohol Withdrawal and Alcohol Dependence with an Emphasis on the Use of Older and Newer Anticonvulsants," *Addictive Behaviors* 31(9):1628-49, September 2006.
- 3. Bayard, M. "Alcohol Withdrawal Syndrome," *American Family Physician* 69(3):1443-50, 2004.
- 4. Blackwood, C.L. "Measurement of Alcohol Withdrawal," *American Family Physician* 62(5):954-57, 2000.
- 5. *Diagnostic and Statistical Manual of Mental Disorders*, Text Revision, 4th Edition, (Copyright 2000). American Psychiatric Association.
- 6. Ewing, J.A. "Detecting Alcoholism: The CAGE Questionnaire," JAMA 252:1905-1907, 1984.
- 7. Jane L. "How is Alcohol Withdrawal Syndrome Best Managed in the Emergency Department?" *International Emergency Nursing* 18(2):89-98, April 2010.
- 8. Jennings-Ingle, S. "The Sobering Facts About Alcohol Withdrawal Syndrome," *Nursing Made Incredibly Easy* 5(1):50-60, January/February 2007.
- 9. The Joint Commission. *Comprehensive Accreditation Manual for Hospitals: The Official Handbook.* Standard NPSG.01.01.01. Oakbrook Terrace, II.: The Joint Commission, 2010.
- 10. The Joint Commission. *Comprehensive Accreditation Manual for Hospitals: The Official Handbook*. Standard RC.01.03.01. Oakbrook Terrace, II.: The Joint Commission, 2010.
- 11. Khan, A., et al. "Predictors of Mortality in Patients with Delirium Tremens," *Academic Emergency Medicine* 15(8):788-90, August 2008.
- 12. Mohr, W.K. Psychiatric-Mental Health Nursing: Evidence-Based Concepts, Skills, and Practices, 7th ed. Philadelphia: Lippincott Williams & Wilkins, 2008.
- 13. Sullivan, J.T., et al. "Assessment of Alcohol Withdrawal: The Revised Clinical Institute Withdrawal Assessment for Alcohol Scale (CIWA-Ar)," *British Journal of Addiction* 84:1353-57, 1989.

Alcohol Withdrawal Management

1. Perform an admission physical and history according to your facility's policy. If applicable, complete the CIWA-Ar scale.

- 2. Assess the patient for signs of inadequate nutrition and dehydration. Provide nutrition and fluids, as ordered.
- 3. During acute withdrawal, monitor the patient's mental status and vital signs every 30 minutes to 2 hours.
- 4. If the patient isn't experiencing signs and symptoms of alcohol withdrawal, but it is suspected based on the patient's history, continue to monitor the patient frequently.
- 5. Provide safety measures, as needed.
- 6. Use a nonthreatening manner when performing care.
- 7. Provide supportive care based on the patient's overall condition.
- 8. After withdrawal, or as part of a detoxification program, refer the patient to Alcoholics Anonymous.
- 9. Document the procedure.