

Selected Topics: Psychiatric Emergencies



PSYCHIATRIC EMERGENCIES FOR CLINICIANS: EMERGENCY DEPARTMENT MANAGEMENT OF ALCOHOL WITHDRAWAL

Scott A. Simpson, MD, MPH,^{*†} Michael P. Wilson, MD, PHD,^{‡§} and Kimberly Nordstrom, MD, JD^{*†§}

^{*}Denver Health Medical Center, Denver, Colorado, [†]University of Colorado Denver School of Medicine, Aurora, Colorado, [‡]University of California at San Diego Medical Center, San Diego, California, and [§]Department of Emergency Medicine Behavioral Emergencies Research Laboratory, University of California San Diego, San Diego, California

Reprint Requests: Kimberly Nordstrom, MD, JD, Psychiatric Emergency Services, Denver Health Medical Center, 777 Bannock St., Mailcode 0116, Denver, CO 80204

Keywords—alcohol; withdrawal; altered mental status; agitation; detoxification

CLINICAL SCENARIO

A 50-year-old woman with schizophrenia was brought in by staff from a homeless shelter for cough. She complained of productive, nonbloody sputum for 3 days without shortness of breath. Her vital signs on presentation were 99.0°F (37.2°C), pulse 100 bpm, blood pressure 130/90 mm Hg, respiratory rate 18 breaths/min, and pulse oximetry 94% on room air. Her blood alcohol concentration (BAC) by breathalyzer was 70 mg/dL. The patient was thin, disheveled, and comfortable; she was triaged to a hallway bed in a busy emergency department (ED). The patient was receiving antibiotics for pneumonia and intravenous fluids 4 hours later when she began yelling at nurses and complaining of “shadows” in the room. She appeared diaphoretic, flushed, and tremulous; she complained of anxiety and an upset stomach. Her repeat vital signs were pulse 125 bpm and blood pressure 145/95 mm Hg; her respiratory rate and temperature remained unchanged.

What Do You Think is Going on with This Patient?

This patient initially presented for pneumonia. However, she begins experiencing alcohol withdrawal syndrome after a prolonged stay in the ED.

What Key Findings Lead to the Diagnosis?

The presence of characteristic clinical symptoms define alcohol withdrawal syndrome. Alcohol withdrawal begins approximately 6 hours after the last alcoholic drink. Early symptoms include anxiety, nausea, headache, and autonomic hyperactivity (e.g., tachycardia, elevated blood pressure, sweating), tremors, and hyperactive reflexes (1). Autonomic hyperactivity peaks about 24 to 48 hours after the last drink. Progressive symptoms of withdrawal include visual, tactile, or auditory hallucinations; agitation; and generalized tonic-clonic seizures.

What Other Diagnoses Should You Consider?

Delirium should be considered as a cause of altered mental status, given the presence of abnormal vital signs and infection. Alcoholic patients may also have complications from liver disease, sepsis, cardiac disease, metabolic abnormalities, or gastrointestinal problems. Obtaining a

Table 1. Prediction of Alcohol Withdrawal Severity Scale (8)

Have you consumed any amount of alcohol within the last 30 days? Or did the patient have a positive BAC on admission?	If no, then stop. PAWSS is negative. If yes, then continue to score 1 point for each of below:
Have you been recently intoxicated/drunk, within the last 30 days?	—
Have you ever undergone alcohol use disorder rehabilitation treatment or treatment for alcoholism?	—
Have you ever experience any previous episodes of alcohol withdrawal, regardless of severity?	—
Have you ever experienced blackouts?	—
Have you ever experienced alcohol withdrawal seizures?	—
Have you ever experienced delirium tremens or DTs?	—
Have you combined alcohol with other “downers” like benzodiazepines or barbiturates, during the last 90 days?	—
Have you combined alcohol with any other substances of abuse, during the last 90 days?	—
Was the patient’s BAC on presentation ≥ 200 mg/dL?	—
Is there evidence of increased autonomic activity (e.g., HR >120 bpm, tremor, sweating, agitation, or nausea)?	—

BAC = blood alcohol concentration; PAWSS = Prediction of Alcohol Withdrawal Severity Scale; HR = heart rate. A score of ≥ 4 suggests high risk for moderate to severe alcohol withdrawal syndrome.

reliable history from the intoxicated patient is difficult, and clinicians should be wary of undisclosed medical issues. Benzodiazepine and barbiturate withdrawals are clinically similar to alcohol withdrawal; withdrawal from agents with longer half-lives (e.g., diazepam or clonazepam) may not begin for several days after the patient’s last use. Atypical alcohols, such as methanol, ethylene glycol, or isopropanol induce intoxication and, rarely, withdrawal in patients with negative BACs or other evidence of ethanol use (2). Nonalcoholic delirium is more likely to be characterized by hypoactivity and a reduced level of alertness (3). Wernicke encephalopathy should be considered among alcoholic patients with confusion or ataxia (4). Although this patient has a history of schizophrenia, worsening psychosis during withdrawal is unlikely to represent decompensation of psychiatric illness.

As an Emergency Physician, What Do You Need to Know About Alcohol Use Disorder?

Emergency physicians must consider the risk of alcohol withdrawal in all patients and initiate appropriate management. Early recognition and treatment of alcohol withdrawal in the ED saves lives (5,6).

The onset of alcohol withdrawal correlates with the last ingestion of alcohol rather than the blood alcohol concentration (BAC). Because alcohol is metabolized at about 15 mg/dL per hour regardless of initial concentration, and withdrawal begins only several hours after the last drink, many patients will experience alcohol withdrawal before their BAC is zero. Withdrawal is a recognized complication of prolonged ED stays and is experienced by 80% of hospitalized or homeless patients with an alcohol use disorder (1).

As for this patient, hallucinations are common in alcohol withdrawal. Hallucinations begin 7 to 48 hours

after the last drink and may persist beyond detoxification (7). These hallucinations are treated with benzodiazepines. Antipsychotics should be avoided because they may increase sedation, impair consciousness, and mask symptoms that herald worsening withdrawal.

It is possible to identify patients at risk of withdrawal. A score of ≥ 4 on the Prediction of Alcohol Withdrawal Severity Scale (PAWSS) prospectively predicts alcohol withdrawal among hospitalized patients, with respective positive and negative predictive values of 93% and $>99\%$ (Table 1) (8). Once withdrawal begins, standardized instruments (e.g., the Clinical Institute Withdrawal Assessment for Alcohol scale [CIWA-AR]) help assess the severity of withdrawal (9).

Fewer than 10% of patients in withdrawal experience complicated withdrawal, which is defined by the presence of seizures or withdrawal delirium (“delirium tremens”) (1). The hospital mortality of complicated withdrawal is as high as 15%, and half of patients will die within a decade (3,10). The risk for withdrawal seizures is highest in the first 24 hours after the last drink, while delirium typically develops 3 to 4 days after the last drink. Seizures are generalized and often occur in clusters. A history of complicated withdrawal is the most reliable risk factor for seizures or delirium. Other identified risk factors include older age, dehydration, comorbid medical illness or brain lesions, low platelet count, and hypokalemia (11,12). Persistent tachycardia and hyperthermia are associated with mortality (5).

Patients with alcohol use disorders are at risk for metabolic abnormalities arising from poor nutrition, medical illness, and the toxic effects of alcohol. These abnormalities require treatment in the ED to prevent additional complications. Hypokalemia and hypomagnesemia may result from poor intake and alcohol-induced renal disease (13). A finger-stick glucose should be obtained for all

Download English Version:

<https://daneshyari.com/en/article/3245604>

Download Persian Version:

<https://daneshyari.com/article/3245604>

[Daneshyari.com](https://daneshyari.com)