

Alcohol Detoxification

Clinical Institute Withdrawal Assessment of Alcohol Scale, Revised (CIWA – Ar)

Many qualification instruments have been developed for monitoring alcohol withdrawal (Guthrie, 1989; Sullivan et al., 1989; Sellers & Naranjo, 1983). No single instrument is significantly superior to others. What is clear is that there are significant clinical advantages to quantifying the alcohol withdrawal syndrome. Quantification is key to preventing excess morbidity and mortality in a group of patients who are at risk for alcohol withdrawal. Such instruments help clinical personnel recognize the process of withdrawal before it progresses to more advanced stages, such as *delirium tremens*. By intervening with appropriate pharmacotherapy in those patients who require it, while sparing the majority of patients whose syndromes do not progress to that point, the clinician can prevent over and under treatment of the alcohol withdrawal syndrome. Finally, quantifying and monitoring the withdrawal process can modify the treatment regimen modified as needed.

The best known and most extensively studied scale is the Clinical Institute Withdrawal Assessment – Alcohol (CIWA – A) and a shortened version, the CIWA – A revised (CIWA – Ar). This scale has well-documented reliability, reproducibility and validity, based on comparison to ratings by expert clinicians (Knott, et al., 1981; Wiehl, et al., 1994; Sullivan, et al., 1989). From 30 signs and symptoms, the scale has been carefully refined to a list of 10 signs and symptoms in the CIWA – Ar (Wiehl, et al., 1994). It is thus easy to use and has been shown to be feasible to use in a variety of clinical settings, including detoxification units (Naranjo, et al., 1983; Hoey, et al., 1994), psychiatry units (Heinala, et al., 1990), and general medical/surgical wards (Young, et al., 1987; Katta, 1991). The CIWA – Ar has added usefulness because high scores, in addition to indicating severe withdrawal, are also predictive of the development of seizures and delirium (Naranjo, et al., 1983; Young, et al., 1987).

Copied from: ASAM Patient Placement Criteria, Second Edition - Revised

CLINICAL PRACTICE GUIDELINES: ALCOHOL DETOXIFICATION

Clinical Institute Withdrawal Assessment of Alcohol Scale, Revised (CIWA - Ar)

What it Measures: The **CIWA – Ar** can measure 10 symptoms. Scores of less than 8 to 10 indicate minimal to mild withdrawal. Scores of 8 to 15 indicate moderate withdrawal (marked autonomic arousal); and scores of 15 or more indicate severe withdrawal. The assessment requires 2 minutes to perform (Sullivan, et al, 1989).

CIWA – Ar categories, with the range of scores in each category, are as follows:

Agitation	(0 – 7)
Anxiety	(0 – 7)
Auditory Disturbances	(0 – 7)
Clouding of Sensorium	(0 – 4)
Headache	(0 – 7)
Nausea/Vomiting	(0 – 7)
Paroxysmal Sweats	(0 – 7)
Tactile Disturbances	(0 – 7)
Tremor	(0 – 7)
Visual Disturbances	(0 – 7)

A study of the revised version of the CIWA predicted that those with a score of >15 were at increased risk for severe alcohol withdrawal (RR 3.72; 95% confidence interval 2.82 – 4.85) the higher the score the greater the risk. Some patients (6.4%) still suffered complications, despite low scores, if left untreated (Foy, et al., 1988).

EXAMPLE - ALCOHOL DETOXIFICATION PROTOCOL The following is an example of a protocol developed around the use of the CIWA – Ar in an alcohol detoxification program:

1. CIWA to be completed on admission and q 8 hours for a period of 24 hours.
2. Determine and record blood alcohol concentration (BAC) by breathalyzer on admission.
3. Vital signs: pulse rate and BP q 4 hours. **Call physician if patient has HR > 110mmHg, DBP > 120 mmHg, or SBP > 180 mmHg.**
4. Obtain serum glucose, HFP (hepatic function profile), CMEP (comprehensive metabolic panel, CBC w/DIFF and urine for drug screen.
5. Give Thiamine 100 mg IM now, and then Thiamine 100 mg PO bid times 3 days.
6. If CIWA score is > 0 but ≤ 8 and vital signs are stable, no medication is required. Repeat vital signs q 4 hours and the CIWA q 8 hours. (May repeat CIWA and vital signs as needed.)
7. If CIWA is > 8 but < 15, give Lorazepam (Ativan) 2 mg PO/IM and repeat vital signs q 2 hours and the CIWA q 4 hours.
8. If CIWA is ≥15 or DBP > 110 mmHg, give Lorazepam (Ativan) 2 mg PO/IM q 1 hour until patient has a CIWA of < 15 or DBP < 110 mmHg (CIWA and vital signs checked q 1 hour until patient’s CIWA is < 15 and DBP < 110 mmHg.) When CIWA

is between 8 and 15, give Lorazepam (Ativan) 2 mg PO/IM and resume vital signs q 2 hours and the CIWA q 4 hours.

9. CALL MD IF PATIENT REQUIRES ≥ 6 mg OF LORAZEPAM (ATIVAN) IN THREE HOURS.

10. May awaken patient to complete CIWA and vital signs.

11. When CIWA is ≤ 8 for 3 consecutive 8-hour increments, d/c CIWA protocol.

**Addiction Research Foundation
Clinical Institute Withdrawal Assessment for Alcohol, Revised (CIWA – Ar)**

Patient: _____ Pulse or heart rate, take for 1 minute: _____
Date: _____ Time: _____ Blood Pressure: _____

<p>Nausea and Vomiting: Ask, “Do you feel sick to your stomach? Have you vomited?” Observation:</p> <p>0 No nausea and no vomiting 1 Mild nausea and no vomiting 2 3 4 Intermittent nausea with dry heaves 5 6 7 Constant nausea, frequent dry heaves and vomiting.</p>	<p>Tactile Disturbance: Ask, “Have you any itching, pins and needles sensations, any burning, any numbness, or do you feel bugs crawling under your skin?” Observation:</p> <p>0 None 1 Very mild itching, pins and needles, burning or numbness 2 Mild itching, pins and needles, burning or numbness 3 Moderate itching, pins and needles, burning or numbness 4 Moderate severe hallucinations 5 Severe hallucinations 6 Extremely severe hallucinations 7 Continuous hallucinations</p>
<p>Tremor: Arms extended and fingers spread apart. Observation:</p> <p>0 No tremor 1 Not visible but can be felt fingertip to fingertip 2 3 4 Moderate, with patient’s arm extended 5 6 7 Severe, even with arms not extended</p>	<p>Auditory Disturbances: Ask, “Are you more aware of sounds around you? Are they harsh? Do they frighten you? Are you hearing anything that is disturbing to you? Are you hearing things you know are not there?” Observation:</p> <p>0 Not present 1 Very mild harshness or ability to frighten 2 Mild harshness or ability to frighten 3 Moderate harshness or ability to frighten 4 Moderately severe hallucinations 5 Severe hallucinations 6 Extremely severe hallucinations 7 Continuous hallucinations</p>
<p>Paroxysmal Sweats: Observation:</p> <p>0 No sweat visible 1 2 3 4 Beads of sweat obvious on forehead 5 6 7 Drenching sweats</p>	<p>Visual Disturbances: Ask, “Does the light appear to be too bright? Is the color different? Does it hurt your eyes? Are you seeing anything that is disturbing to you? Are you seeing things you know are not there?” Observation:</p> <p>0 Not present 1 Very mild sensitivity 2 Mild sensitivity 3 Moderate sensitivity 4 Moderately severe hallucinations 5 Severe hallucinations 6 Extremely severe hallucinations 7 Continuous hallucinations</p>

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Patient: _____ Pulse or heart rate, take for 1 minute: _____
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<p>Anxiety: Ask, “Do you feel nervous?” Observation:</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 20px;">0</td><td>No anxiety, at ease</td></tr> <tr><td>1</td><td>Mildly anxious</td></tr> <tr><td>2</td><td></td></tr> <tr><td>3</td><td></td></tr> <tr><td>4</td><td>Moderately anxious, or guarded, so anxiety is inferred</td></tr> <tr><td>5</td><td></td></tr> <tr><td>6</td><td></td></tr> <tr><td>7</td><td>Equivalent to acute panic states, as seen in severe delirium or acute schizophrenic reactions</td></tr> </table>	0	No anxiety, at ease	1	Mildly anxious	2		3		4	Moderately anxious, or guarded, so anxiety is inferred	5		6		7	Equivalent to acute panic states, as seen in severe delirium or acute schizophrenic reactions	<p>Headache, Fullness in Head: Ask, “Does your head feel different? Does it feel like there is a band around your head?” Do not rate dizziness or lightheadedness. Otherwise, rate severity.</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 20px;">0</td><td>Not present</td></tr> <tr><td>1</td><td>Very mild</td></tr> <tr><td>2</td><td>Mild</td></tr> <tr><td>3</td><td>Moderate</td></tr> <tr><td>4</td><td>Moderately severe</td></tr> <tr><td>5</td><td>Severe</td></tr> <tr><td>6</td><td>Very severe</td></tr> <tr><td>7</td><td>Extremely severe</td></tr> </table>	0	Not present	1	Very mild	2	Mild	3	Moderate	4	Moderately severe	5	Severe	6	Very severe	7	Extremely severe
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<p>Total CIWA – Ar Score _____ (maximum possible score = 67)</p> <p>Rater's Initials _____</p>	<p>Patients scoring less than 10 do not usually need additional medication for withdrawal.</p>
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Note: The CIWA – Ar is not copyrighted and may be used freely. Source: Sullivan JT, Sykora K, Schneiderman J, Naranjo CA & Sellers EM (1989) Assessment of alcohol withdrawal: The revised Clinical Institute Withdrawal Assessment for Alcohol scale (CIWA – Ar) *British Journal of Addiction* 84:1353 – 1357