

Alcohol Withdrawal and the CIWA-Ar Scale Nurse-Doctor Co-Teaching Session Holli Murray, MSN, RN, PCCN Bill Martin-Doyle, MD, MPH



#### Learning Objectives

1. Describe the signs and symptoms of alcohol withdrawal

2. Determine who is appropriate for a CIWA-based protocol as compared to a standing regimen

3. Utilize the CIWA scale to guide symptom-triggered management of alcohol withdrawal



## What is the CIWA-Ar Scale?

- Clinical Institutes Withdrawal Assessment Scale for Alcohol (CIWA-Ar)
- "Symptom-triggered therapy"
- Studied primarily in moderate severity withdrawal (i.e., no seizures, DTs, able to take PO, no severe comorbidities...)
- Ten areas to assess and score (0-7 each), total score of 67
  - Mild: 0-8

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- Moderate: 9-15
- Severe: > 16, higher risk seizure/DTs
- Benefits compared to standing regimen:
  - Reduced total amount of benzodiazepines administered
  - Shorter duration of treatment

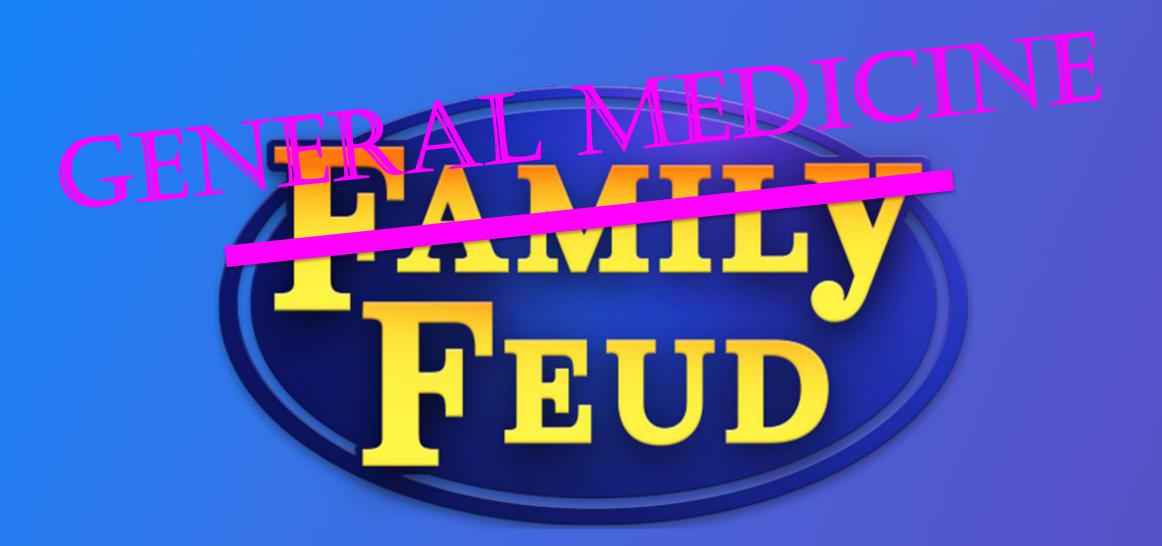
#### Alcohol Withdrawal Assessment Scoring Guidelines (CIWA - Ar)

| Nausea/Vomiting - Rate on scale 0 - 7  | Tremors - have patient extend arms & spread fingers. Rate   |
|--|---|
|  | on scale 0 - 7.   |
| 0 - None   | 0 - No tremor   |
| 1 - Mild nausea with no vomiting   | 1 - Not visible, but can be felt fingertip to fingertip   |
| 2  | 2   |
| 3  | 3   |
| 4 - Intermittent nausea  | 4 - Moderate, with patient's arms extended  |
| 5  | 5   |
| 6  | 6   |
| 7 - Constant nausea and frequent dry heaves and  | 7 - severe, even w/ arms not extended   |
| vomiting   |   |
|  |   |
| Anxiety - Rate on scale 0 - 7  | Agitation - Rate on scale 0 - 7   |
| 0 - no anxiety, patient at ease  | 0 - normal activity   |
| 1 - mildly anxious   | 1 - somewhat normal activity  |
| 2  | 2   |
| 3  | 3   |
| 4 - moderately anxious or guarded, so anxiety is inferred  | 4 - moderately fidgety and restless   |
| 5  | 5   |
| 6  | 6   |
| 7 - equivalent to acute panic states seen in severe  | 7 - paces back and forth, or constantly thrashes about  |
| delirium or acute schizophrenic reactions.   |   |
|  |   |
| Paroxysmal Sweats - Rate on Scale 0 - 7.   | Orientation and clouding of sensorium - Ask, "What day  |
| 0 - no sweats  | this? Where are you? Who am I?" Rate scale 0 - 4  |
| <ol> <li>barely perceptible sweating, palms moist</li> </ol>   | 0 - Oriented  |
| 2  | 1 - cannot do serial additions or is uncertain about date   |
| 3  |   |
| 4 - beads of sweat obvious on forehead   | 2 - disoriented to date by no more than 2 calendar days   |
| 5  |   |
| 6  | 3 - disoriented to date by more than 2 calendar days  |
| 7 - drenching sweats   | 4 - Disoriented to place and / or person  |
|  |   |
| Tactile disturbances - Ask, "Have you experienced any  | Auditory Disturbances - Ask, "Are you more aware of   |
| itching, pins & needles sensation, burning or numbness,  | sounds around you? Are they harsh? Do they startle you? D   |
| or a feeling of bugs crawling on or under your skin?"  | you hear anything that disturbs you or that you know isn't  |
|  | there?"   |
| 0 - none   | 0 - not present   |
| 1 - very mild itching, pins & needles, burning, or   | 1 - Very mild harshness or ability to startle   |
| numbness   |   |
| 2 - mild itching, pins & needles, burning, or numbness   | 2 - mild harshness or ability to startle  |
| 3 - moderate itching, pins & needles, burning, or  | 3 - moderate harshness or ability to startle  |
| numbness   | 5 - moderate marshiness of ability to startie   |
|  | 4 moderate hall usingtions  |
| 4 - moderate hallucinations  | 4 - moderate hallucinations   |
| 5 - severe hallucinations  | 5 - severe hallucinations   |
|  | 6 - extremely severe hallucinations   |
| 6 - extremely severe hallucinations  |   |
| 6 - extremely severe hallucinations<br>7 - continuous hallucinations   | 7 - continuous hallucinations   |
| 7 - continuous hallucinations  | 7 - continuous hallucinations   |
| 7 - continuous hallucinations <u>Visual disturbances</u> - Ask, "Does the light appear to be   | 7 - continuous hallucinations<br><u> Headache</u> - Ask, "Does your head feel different than usual?   |
| 7 - continuous hallucinations<br><u>Visual disturbances</u> - Ask, "Does the light appear to be<br>too bright? Is its color different than normal? Does it hurt  | 7 - continuous hallucinations<br><u>Headache</u> - Ask, "Does your head feel different than usual?<br>Does it feel like there is a band around your head?" Do not   |
| 7 - continuous hallucinations<br>Visual disturbances - Ask, "Does the light appear to be<br>too bright? Is its color different than normal? Does it hurt<br>your eyes? Are you seeing anything that disturbs you or  | 7 - continuous hallucinations<br><u> Headache</u> - Ask, "Does your head feel different than usual?   |
| 7 - continuous hallucinations<br>Visual disturbances - Ask, "Does the light appear to be<br>too bright? Is its color different than normal? Does it hurt<br>your eyes? Are you seeing anything that disturbs you or<br>that you know isn't there?"   | 7 - continuous hallucinations<br><u>Headache</u> - Ask, "Does your head feel different than usual?<br>Does it feel like there is a band around your head?" Do not rate dizziness or lightheadedness.  |
| 7 - continuous hallucinations<br><u>Visual disturbances</u> - Ask, "Does the light appear to be<br>too bright? Is its color different than normal? Does it hurt<br>your eyes? Are you seeing anything that disturbs you or<br>that you know isn't there?"<br>0 - not present   | 7 - continuous hallucinations     Headache - Ask, "Does your head feel different than usual?     Does it feel like there is a band around your head?" Do not     rate dizziness or lightheadedness.     0 - not present   |
| 7 - continuous hallucinations<br>Visual disturbances - Ask, "Does the light appear to be<br>too bright? Is its color different than normal? Does it hurt<br>your eyes? Are you seeing anything that disturbs you or<br>that you know isn't there?"   | 7 - continuous hallucinations<br><u>Headache</u> - Ask, "Does your head feel different than usual?<br>Does it feel like there is a band around your head?" Do not rate dizziness or lightheadedness.  |
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| 7 - continuous hallucinations<br>Visual disturbances - Ask, "Does the light appear to be<br>too bright? Is its color different than normal? Does it hurt<br>your eyes? Are you seeing anything that disturbs you or<br>that you know isn't there?"<br>0 - not present<br>1 - very mild sensitivity   | <ul> <li>7 - continuous hallucinations</li> <li><u>Headache</u> - Ask, "Does your head feel different than usual?<br/>Does it feel like there is a band around your head?" Do not<br/>rate dizziness or lightheadedness.</li> <li>0 - not present</li> <li>1 - very mild</li> </ul>                     |
| 7 - continuous hallucinations<br>Visual disturbances - Ask, "Does the light appear to be<br>too bright? Is its color different than normal? Does it hurt<br>your eyes? Are you seeing anything that disturbs you or<br>that you know isn't there?"<br>0 - not present<br>1 - very mild sensitivity<br>2 - mild sensitivity<br>3 - moderate sensitivity   | 7 - continuous hallucinations     Headache - Ask, "Does your head feel different than usual?     Does it feel like there is a band around your head?" Do not     rate dizziness or lightheadedness.     0 - not present     1 - very mild     2 - mild     3 - moderate                                 |
| 7 - continuous hallucinations<br>Visual disturbances - Ask, "Does the light appear to be<br>too bright? Is its color different than normal? Does it hurt<br>your eyes? Are you seeing anything that disturbs you or<br>that you know isn't there?"<br>0 - not present<br>1 - very mild sensitivity<br>2 - mild sensitivity<br>3 - moderate sensitivity<br>4 - moderate hallucinations                              | 7 - continuous hallucinations<br>Headache - Ask, "Does your head feel different than usual?<br>Does it feel like there is a band around your head?" Do not<br>rate dizziness or lightheadedness.<br>0 - not present<br>1 - very mild<br>2 - mild<br>3 - moderately<br>4 - moderately severe             |
| 7 - continuous hallucinations<br>Visual disturbances - Ask, "Does the light appear to be<br>too bright? Is its color different than normal? Does it hurt<br>your eyes? Are you seeing anything that disturbs you or<br>that you know isn't there?"<br>0 - not present<br>1 - very mild sensitivity<br>2 - mild sensitivity<br>3 - moderate sensitivity<br>4 - moderate hallucinations<br>5 - severe hallucinations | 7 - continuous hallucinations<br>Headache - Ask, "Does your head feel different than usual?<br>Does it feel like there is a band around your head?" Do not<br>rate dizziness or lightheadedness.<br>0 - not present<br>1 - very mild<br>2 - mild<br>3 - moderate<br>4 - moderately severe<br>5 - severe |
| 7 - continuous hallucinations<br>Visual disturbances - Ask, "Does the light appear to be<br>too bright? Is its color different than normal? Does it hurt<br>your eyes? Are you seeing anything that disturbs you or<br>that you know isn't there?"<br>0 - not present<br>1 - very mild sensitivity<br>2 - mild sensitivity<br>3 - moderate sensitivity<br>4 - moderate hallucinations                              | 7 - continuous hallucinations<br>Headache - Ask, "Does your head feel different than usual?<br>Does it feel like there is a band around your head?" Do not rate dizziness or lightheadedness.<br>0 - not present<br>1 - very mild<br>2 - mild<br>3 - moderately severe                                  |

- Assess and rate each of the 10 criteria of the CIWA-Ar scale. Each criterion is rated on a scale from 0 to 7, except for "Orientation and clouding of sensorium" which is rated on scale 0 to 4. Add up the scores for all ten criteria. This is the total CIWA-Ar score for the patient at that time. Prophylactic medication should be started for any patient with a total CIWA-Ar score of 9 or greater (ie. start on withdrawal medication). If started on <u>scheduled or fixed dosage</u> medication, additional one time medication should be given for a total CIWA-Ar score of 16 or greater.
- Document vitals and CIWA-Ar assessment on the Withdrawal Assessment Sheet. Document administration of one time medications on the assessment sheet as well.
- B. The CIWA-Ar scale is the most sensitive tool for assessment of the patient experiencing alcohol withdrawal. Nursing assessment is vitally important. Early intervention for CIWA-Ar score of 9 or greater provides the best means to prevent the progression of withdrawal.

#### What is the CIWA Scale and What Symptoms Are Scored?





#### https://www.youtube.com/watch?v=NUKigZjcGy4



| MD+<br>CALC  | Q Search "QT | interval" or "QT" or "EKG" |           |  |  |  |
|--|--------------|----------------------------|-----------|--|--|--|
|  | CIWA-Ar      | for Alcohol Withdra        | wal 🗘     |  |  |  |
| Objectifies alcohol withdrawal severity to help guide therapy. |              |                            |           |  |  |  |
|  | When to Use  | e 🗸 Pearls/Pitfalls 🗸      | Why Use 🗸 |  |  |  |

#### https://www.mdcalc.com/ciwa-ar-alcohol-withdrawal



# VIGNETTES!



#### Case 1

- A 45 year old male is admitted for alcohol withdrawal and ordered for CIWA per protocol every 4 hours
- His CIWA scores following admission are:

| 8:00 | 12:00 | 16:00 | 20:00 | 22:00 |
|------|-------|-------|-------|-------|
| 4    | 5     | 12    | 15    | 17    |

• 2mg lorazepam were given for scores 12 and 15. It is now 22:00.

#### **Do you continue the CIWA?**

### *If the answer is no - stand up!*





- A 70 year old patient with alcohol dependence is admitted for Community Acquired Pneumonia
- Patient was initially hypotensive but is now stabilized
- PMH includes severe Parkinson's Disease.

#### Do you put this patient on CIWA?

#### *If the answer is no - stand up!*





 A 25 year old American Sign Language-speaking deaf patient with alcohol use disorder and no other PMH is admitted for alcohol withdrawal

#### Do you put this patient on CIWA?

#### *If the answer is no - stand up!*



# **SLIDES!**



### **Complications of Alcohol Withdrawal**

~80% mild-tomoderate ~20% severe / complicated:

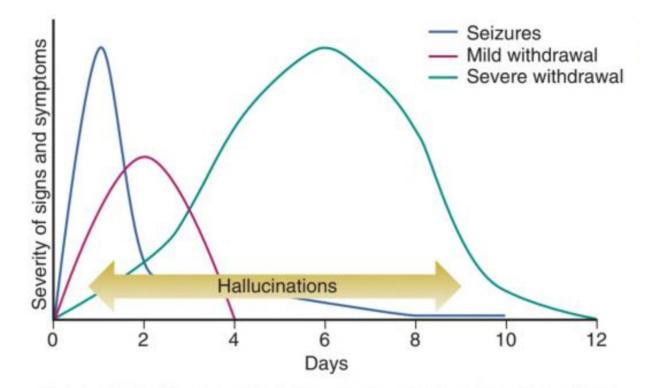
- Hallucinations
- Seizures
- Delirium Tremens



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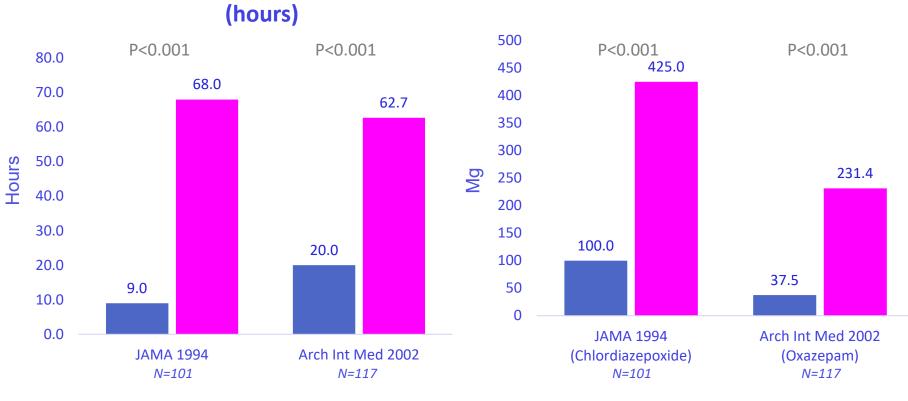


#### Timeline of Alcohol Withdrawal



**Figure 26-5.** Progress of alcohol withdrawal syndrome. (From Frank L, Pead J. New concepts in drug withdrawal: a resource handbook. Melbourne, 1995, University of Melbourne.)

#### CIWA Scoring Reduces Duration of Medication Administration and Benzodiazepine Dosing



Duration of medication administration / admission (hours)

CIWA-triggered dosing Standing / fixed-dose regimen

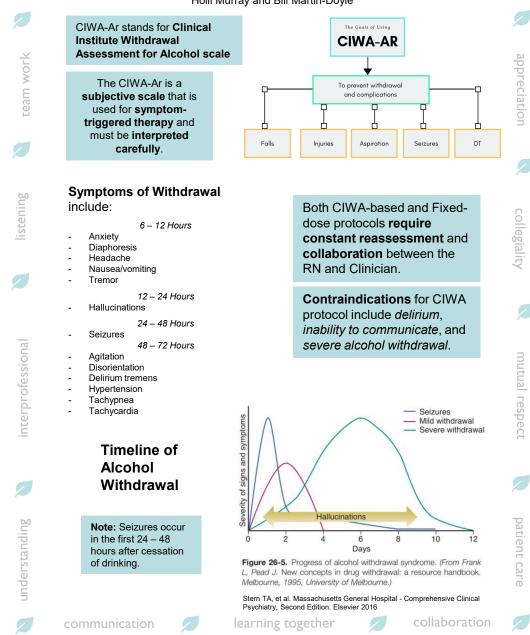
**Total Benzodiazepine Dosing** 

(mg)

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#### **BWH CIWA-Ar Best Practices**

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## **Questions?**



## THANK YOU!!!

