Emergency Department – Withdrawal Workshop

Bjug Borgundvaag, Hasan Sheikh, Kelly Shillington, Katie Dunham

Sept 22, 2023

META:PHI Conference 2023

META:PHI
MENTORING, EDUCATION, AND CLINICAL TOOLS FOR ADDICTION
PARTNERS IN HEALTH INTEGRATION

Presenter Disclosure

- Presenter: Bjug Borgundvaag
- Relationships with financial sponsors:
    - Grants/Research Support: MSH/UHN Innovation Fund, Health Canada, CIHR
    - Speakers Bureau/Honoraria: None
    - Consulting Fees: None
    - Patents: None
    - Other: Schwartz/Reisman Emergency Medicine Institute

Presenter Disclosure

- Presenter: Hasan Sheikh
- Relationships with financial sponsors:
  - Grants/Research Support: MSH/UHN Innovation Fund
  - Other:
    - Clinical Lead, Substance Use Disorders, MHA CoE, Ontario Health
    - Medical Lead, Substance Use Services, UHN

Presenter Disclosure

- Presenter: Kelly Shillington
- Relationships with financial sponsors:
  - Grants/Research Support: None
  - Speakers Bureau/Honoraria: None
  - Consulting Fees: None
  - Patents: None
  - Other: None

Presenter Disclosure

- Presenter: Katie Dunham
- Relationships with financial sponsors:
  - Grants/Research Support: None
  - Speakers Bureau/Honoraria: Indivior
  - Consulting Fees: None
  - Patents: None
  - Other: Employee of Women's College Hospital

Mitigating Potential Bias

- We will make all attempts to use generic names if and when medications are discussed.

Disclosure of Financial Support

- This program has not received financial support.
- This program has not received in-kind support/
- Potential for conflict(s) of interest:
  - Katie Dunham has received payment from META:PHI whose product(s) are being discussed in this program
  - Bjug Borgundvaag has conducted research in this area which has received funding from the SHS/UHN AMO Innovation Fund. He receives a salary from the Schwartz/Reisman Emergency Medicine Institute to do this work
  - Hasan Sheikh has conducted research in this area which has received funding from the SHS/UHN AMO Innovation Fund.

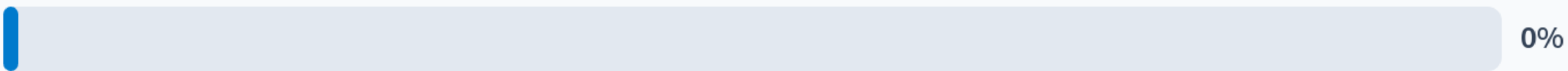
Introduction, Objectives & Background

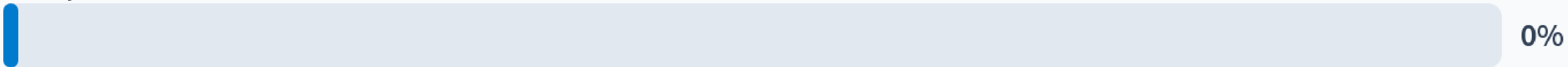
Objectives

1) How to talk to patients about their alcohol use and how to initiate anti-craving medications
2) Learn to recognize alcohol withdrawal and how to properly complete a CIWA-Ar
3) Review the principles of alcohol withdrawal management in the ED with pharmacotherapy
4) Learn when to send to the ED and how to communicate with the ED
5) Introduce META:PHI's Alcohol Use - Emergency Department Toolkit

Who is Here?

What is Your Favorite Style of Pizza?

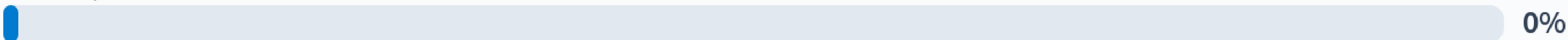




Start the presentation to see live content. For screen share software, share the entire screen. Get help at **pollev.com/app**

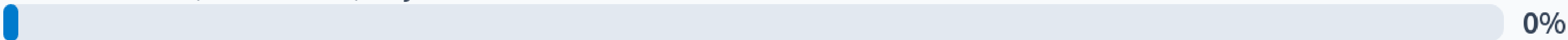
Your current role?

Nurse/Nurse Practitioner



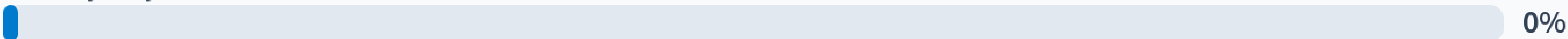
0%

Social Worker/Occ Health/Physician Assistant



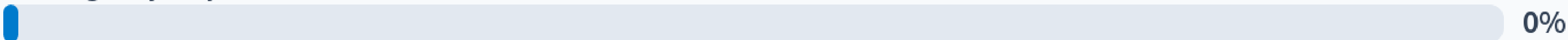
0%

Family Physician



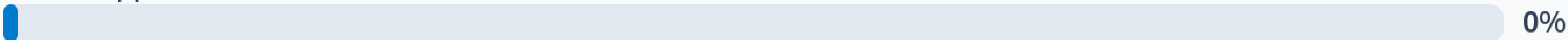
0%

Emergency Physician



0%

Peer Support Worker



0%

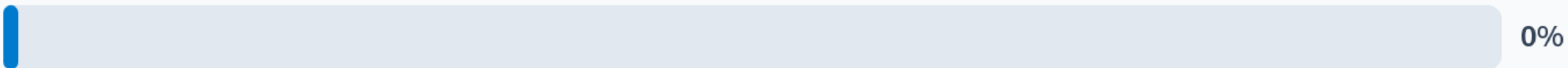
Start the presentation to see live content. For screen share software, share the entire screen. Get help at **pollev.com/app**

Where do you mostly see patients who use substances

Start the presentation to see live content. For screen share software, share the entire screen. Get help at **pollev.com/app**

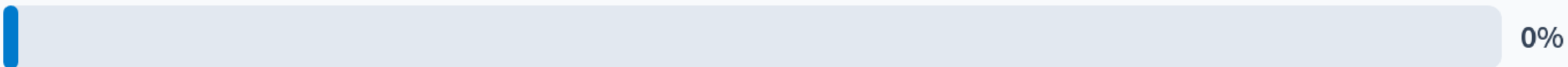
Which best describes your practice location

Urban



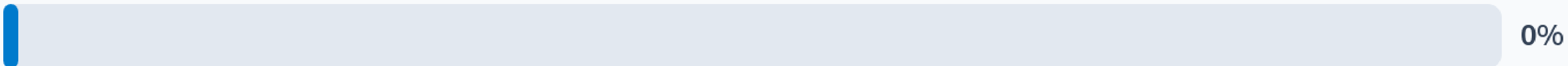
0%

Suburban



0%

Smaller Town/Rural



0%

Start the presentation to see live content. For screen share software, share the entire screen. Get help at **pollev.com/app**

Introduction - Alcohol Worldwide

Source: World Health Organization
Global status report on alcohol and health, 2014

CANADA
UNITED STATES
PORTUGAL
RUSSIA
NAMIBIA
SOUTH AFRICA
AUSTRALIA
NEW ZEALAND

Per capita alcohol consumption (liters)

Mashable

Background - AUD is Common and Deadly

- AUD prevalence in Canada is 18%
- ED visits for alcohol-related reasons (ARR): ~ 1.5% of all ED visits in Ontario
  - Between 2003 and 2016: ↑ 85% ♀, ↑ 50% ♂
- High 1-year all-cause mortality
  - Baseline rate after any ED visit: 0.5%
  - One visit to ED for ARR: 2%
  - Two visits to ED for ARR: 5%
  - Five or more visits for ARR: 9%
  - Men aged 45-59 years old with three or more visits for ARR: 12%

Background – Alcohol and Harm

- Excessive consumption is associated with significant harms
  - More patients hospitalized in Canada annually for alcohol (77k) than for heart attacks (75k)
  - Contributes to > 100k deaths/year in the US
  - Associated with ½ traffic fatalities
  - 10-30% of all ED visits (one study 70% between midnight and 05:00 in the UK)
  - > 500,000 episodes of withdrawal requiring pharmacological management/yr in the US

Background – AUD Treatment

- Tremendous variability in the way alcohol withdrawal syndrome is managed
  - Misunderstanding of drugs and dosages
- The competency of using a symptom guided approach to manage alcohol withdrawal is not commonly taught
- Despite how common AUD is, and the high morbidity and mortality associated with excessive consumption, the very effective treatments which are available are rarely used.
  - Anti-craving medications are effective even in the absence of behavioural interventions
  - NNT between 3-20 for a variety of important outcomes including
    - Reducing heavy drinking days
    - Increased number of days abstinent
    - Complete abstinence
- Despite this, anti-craving medications are under prescribed with fewer than 10% of patients with AUD ever receiving treatment.

AUD Treatment

We can do better!

Word Cloud Activity

Which ONE word described how you feel about managing patients with AUD?

Nobody has responded yet.

Hang tight! Responses are coming in.

Start the presentation to see live content. For screen share software, share the entire screen. Get help at **pollev.com/app**

Process

- We are going to split the group into 4 breakout rooms
- Each one of us are going to cover a specific topic from our objectives
  - Katie – when to send to the ED
  - Kelly – how to perform and use a symptom guided approach to the management of AWS
  - Hasan – how to speak with patients about their alcohol use, and the medical management of AUD (anti-craving medications)
  - Me – The pharmacology behind the management of AWS

Process

- 4 breakout sessions
- YOU stay in the same group PRESENTERS will rotate every 20min

- 20 min session
- 20 min session
- 10 min BREAK
- 20 min session
- 20 min session
- 15 min wrap-up

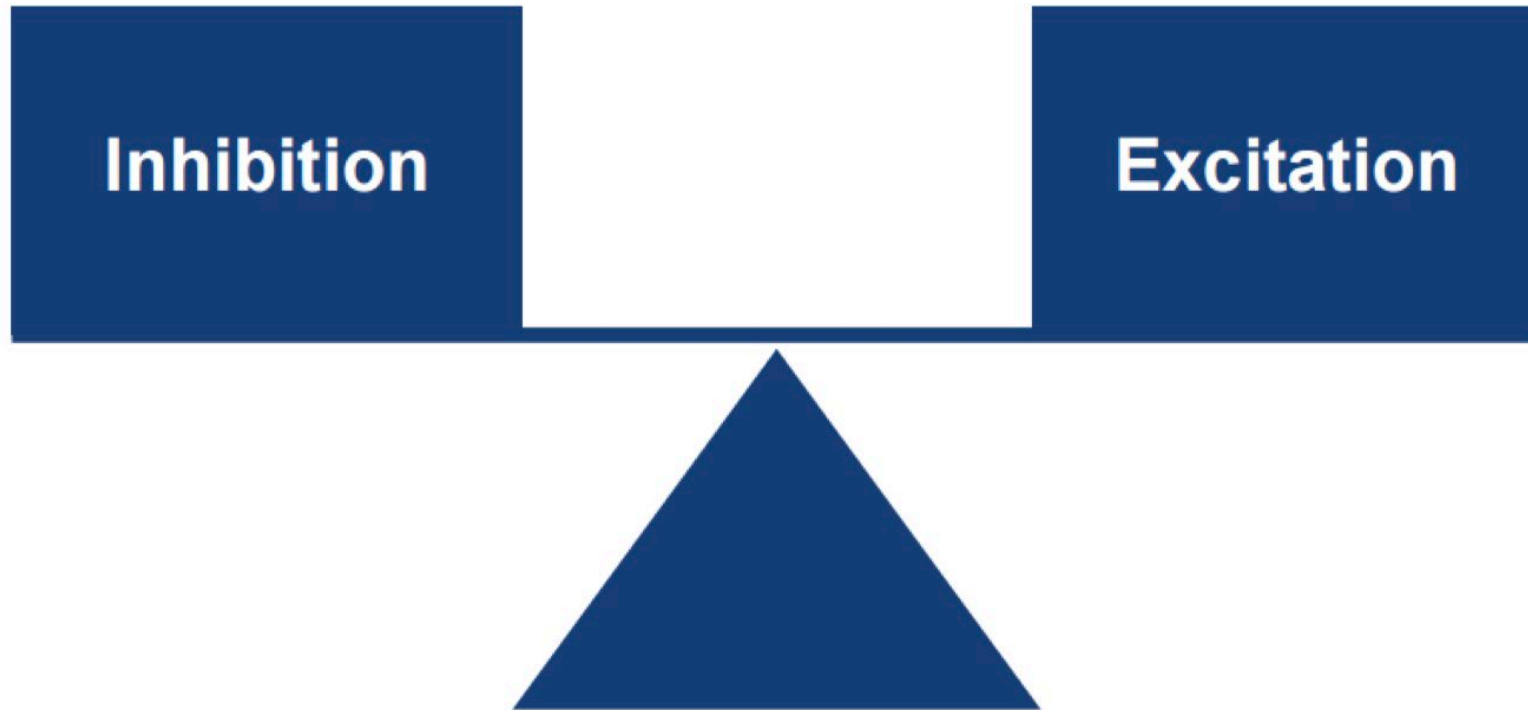
Pharmacology Behind AWS Management

And how to use these medications

Basic Alcohol Pharmacology

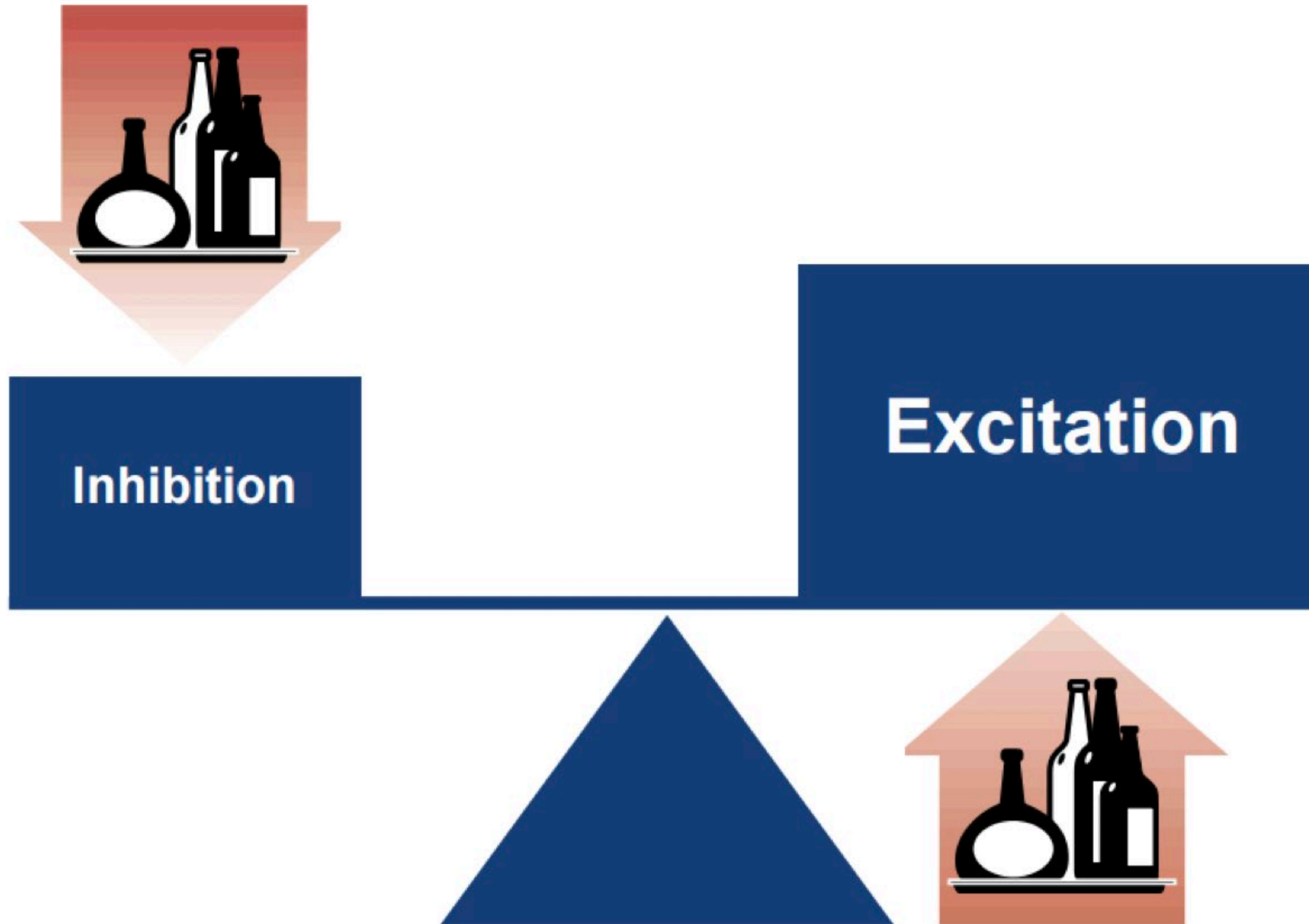
- Alcohol's acute effect is CNS **DEPRESSION**
  - Stimulation of GABA receptors
  - Inhibition of CNS excitation through glutamate receptors
- After prolonged exposure these systems adapt to this chronic inhibition allowing individuals to maintain a relatively normal LOC
- Sudden withdrawal (or lowering) of BAL results in sudden CNS **OVERSTIMULATION**

Alcohol Pharmacology CNS Baseline Excitability

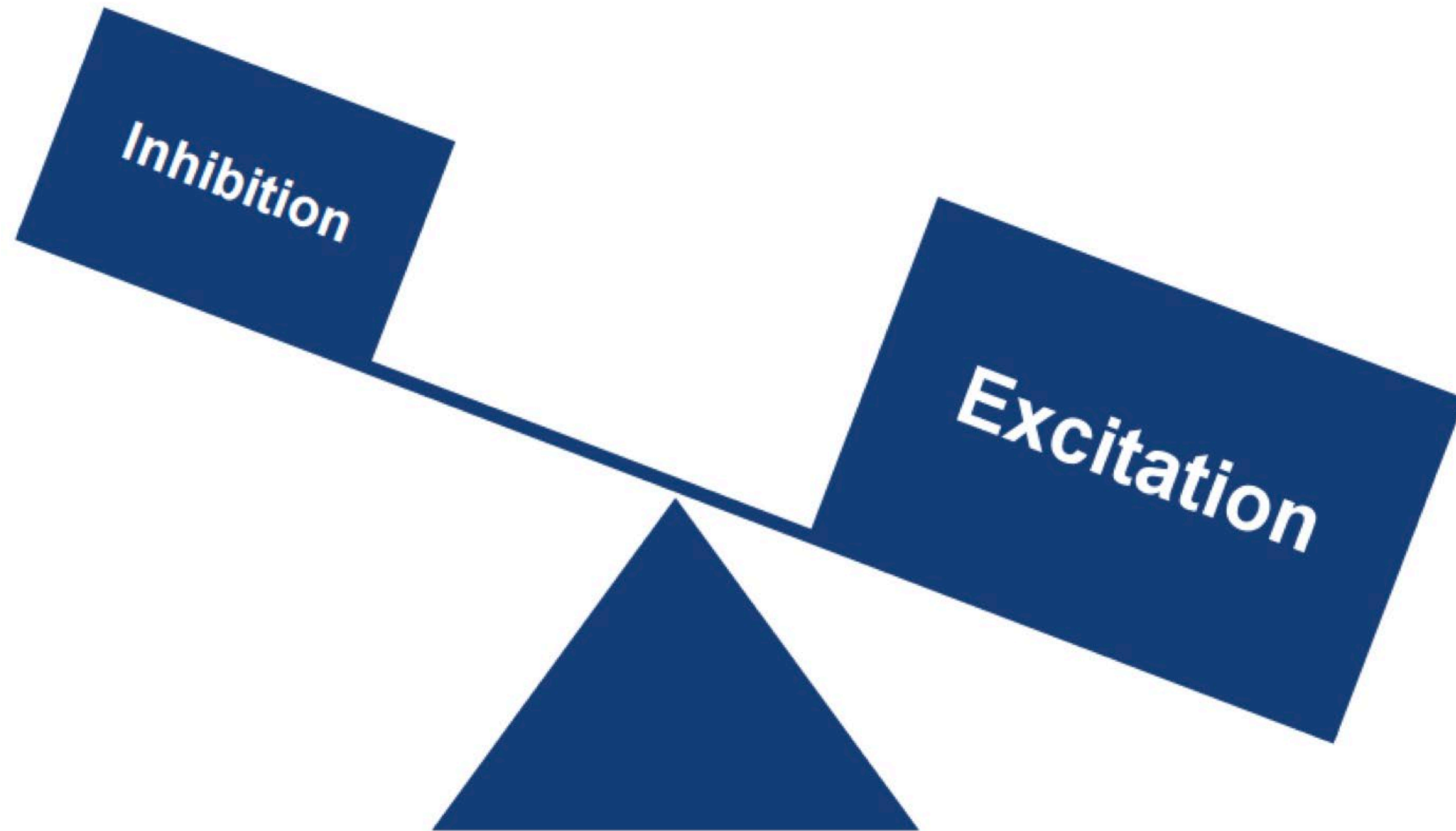


Acute Alcohol Effects

Chronic Alcohol Compensation



Acute Alcohol Withdrawal



What does this look like?

- Tremor is the most reliable and objective sign of AWS
- Intention tremor, typically not visible at rest
- Rapid cycle 5-15 Hz
- It does not fatigue
- The development of withdrawal is variable

- https://youtu.be/R83S0skqhMc

How do we treat this?

- The drugs used to treat AWS mimic the pharmacological effects of alcohol and are active through GABA and Glutamate receptors.
  - Benzodiazepines (should be the drug of first choice)
  - Phenobarbital (when benzodiazepines are not enough)
  - Gabapentin (sub-acute withdrawal)

Benzodiazepines

- Drugs of first choice for AWS
- Why?

Original Contributions

Individualized Treatment for Alcohol Withdrawal

A Randomized Double-blind Controlled Trial

Richard Saitz, MD, MPH; Michael F. Mayo-Smith, MD, MPH; Mark S. Roberts, MD, MPP; Harriet A. Redmond, MS, ARNP, CARN; Donald R. Bernard, MD; David R. Calkins, MD, MPP

Objective.—To assess the effect of an individualized treatment regimen on the intensity and duration of medication treatment for alcohol withdrawal.

Design.—A randomized double-blind, controlled trial.

Setting.—An inpatient detoxification unit in a Veterans Affairs medical center.

Patients.—One hundred one patients admitted for the treatment of alcohol withdrawal who could give informed consent and had no history of seizures or medication use that might alter the clinical course of withdrawal.

Intervention.—Patients were randomized to either a standard course of chlordiazepoxide four times daily with additional medication as needed (fixed-schedule therapy) or to a treatment regimen that provided chlordiazepoxide only in response to the development of the signs and symptoms of alcohol withdrawal (symptom-triggered therapy). The need for administration of "as-needed" medication was determined using a validated measure of the severity of alcohol withdrawal.

Main Outcome Measures.—Duration of medication treatment and total chlordiazepoxide administered.

Results.—The median duration of treatment in the symptom-triggered group was 9 hours compared with 68 hours in the fixed-schedule group (*P*<.001). The symptom-triggered group received 100 mg of chlordiazepoxide, and the fixed-schedule group received 425 mg (*P*<.001). There were no significant differences in the severity of withdrawal during treatment or in the incidence of seizures or delirium tremens.

Conclusions.—Symptom-triggered therapy individualizes treatment, decreases treatment duration and the amount of benzodiazepine used, and is as efficacious as standard fixed-schedule therapy for alcohol withdrawal.

(*JAMA*. 1994;272:5[illegible]

THE ALCOHOL withdraw[illegible] its complications are [illegible] dent patier[illegible]

zodiazepines over all other agents used for alcohol withdrawal and suggests that attention be focused on how to determine when pharmacotherapy is indicated and how to use it most effectively.

When used for alcohol withdra[illegible] benzodiazepines are generally ad[illegible] tered on predetermined dosin[illegible] ules for several days, often in[illegible] tapering doses. This regim[illegible] mended by current text[illegible] cine,[8,9] is the one most c[illegible] treat patients admitt[illegible] drawal,[10] and is the[illegible] treatments are [illegible]

For edito[illegible]

Pre[illegible] dosi[illegible] tie[illegible]

From the Alcohol Treatment Centers, Lausanne (Drs Daeppen, [illegible] Gloo[illegible]

ORIGINAL INVESTIGATION

Symptom-Triggered vs Fixed-Schedule Doses of Benzodiazepine for Alcohol Withdrawal

A Randomized Treatment Trial

Jean-Bernard Daeppen, MD; Pascal Gache, MD; Ulrika Landry, BA; Eva Sekera, MD; Verena Schweizer, MD; Stéphane Gloor, PhD; Bertrand Yersin, MD

Background: In alcohol withdrawal, fixed doses of benzodiazepine are generally recommended as a first-line pharmacologic approach. This study determines the benefits of an individualized treatment regimen on the quantity of benzodiazepine administered and the duration of its use during alcohol withdrawal treatment.

Methods: We conducted a prospective, randomized, double-blind, controlled trial including 117 consecutive patients with alcohol dependence, according to the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition*, entering an alcohol treatment program at both the Lausanne and Geneva university hospitals, Switzerland. Patients were randomized into 2 groups: (1) 56 were treated with oxazepam in response to the development of signs of alcohol withdrawal (symptom-triggered); and (2) 61 were treated with oxazepam every 6 hours with additional doses as needed (fixed-schedule). The administration of oxazepam in group 1 and additional oxazepam in group 2 was determined using a standardized measure of alcohol withdrawal. The main outcome measures were the total amount and duration of treatment with oxazepam, the incidence of complications, and the comfort level.

Results: A total of 22 patients (39%) in the symptom-triggered group were treated with oxazepam vs 100% in the fixed-schedule group (*P*<.001). The mean oxazepam dose administered in the symptom-triggered group was 37.5 mg compared with 231.4 mg in the fixed-schedule group (*P*<.001). The mean duration of oxazepam treatment was 20.0 hours in the symptom-triggered group vs 62.7 hours in the fixed-schedule group (*P*<.001). Withdrawal complications were limited to a single episode of seizures in the symptom-triggered group. There were no differences in the measures of comfort between the 2 groups.

Conclusions: Symptom-triggered benzodiazepine treatment for alcohol withdrawal is safe, comfortable, and associated with a decrease in the quantity of medication and duration of treatment.

Arch Intern Med. 2002;162:1117-1121

AN IMPORTANT advance in the last 3 decades has been the use of benzodiazepines to treat alcohol withdrawal. In the late 1960s, the comparison of chlordiazepoxide with placebo and 3 other drugs established the therapeutic efficacy of benzodiazepines for alcohol withdrawal.[1] Recent meta-analyses concluded that benzodiazepines [illegible] mended over most nonbe[illegible] tive-hypnotic [illegible] better eff[illegible]

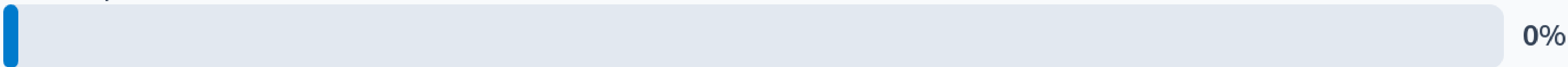
tients. This is in contrast with numerous observations indicating that the pharmacologic treatment of alcohol withdrawal should allow for a degree of individualization. A personal adapta[illegible] tion dosage is n[illegible] tionnaire[illegible]

Benzodiazepines

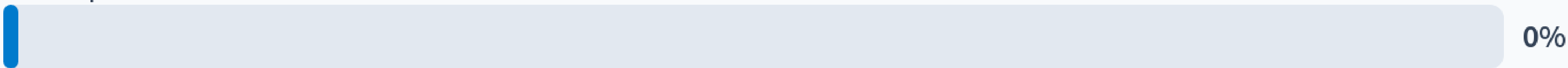
- Drugs of first choice for AWS
- GABA receptor agonists – net effect is CNS depression
- It is important to choose the right drug
  - Pop Up: You are tasked with treating a patient with AWS. Which benzodiazepine would you use?

When treating and ED patient with AWS which benzodiazepine should be your first choice?

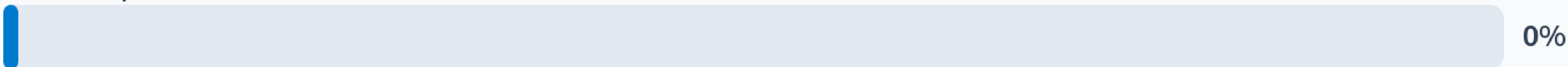
Lorazepam



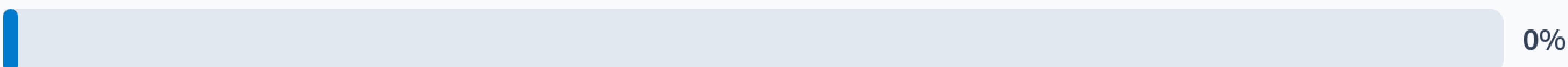
Diazepam



Clonazepam



Other



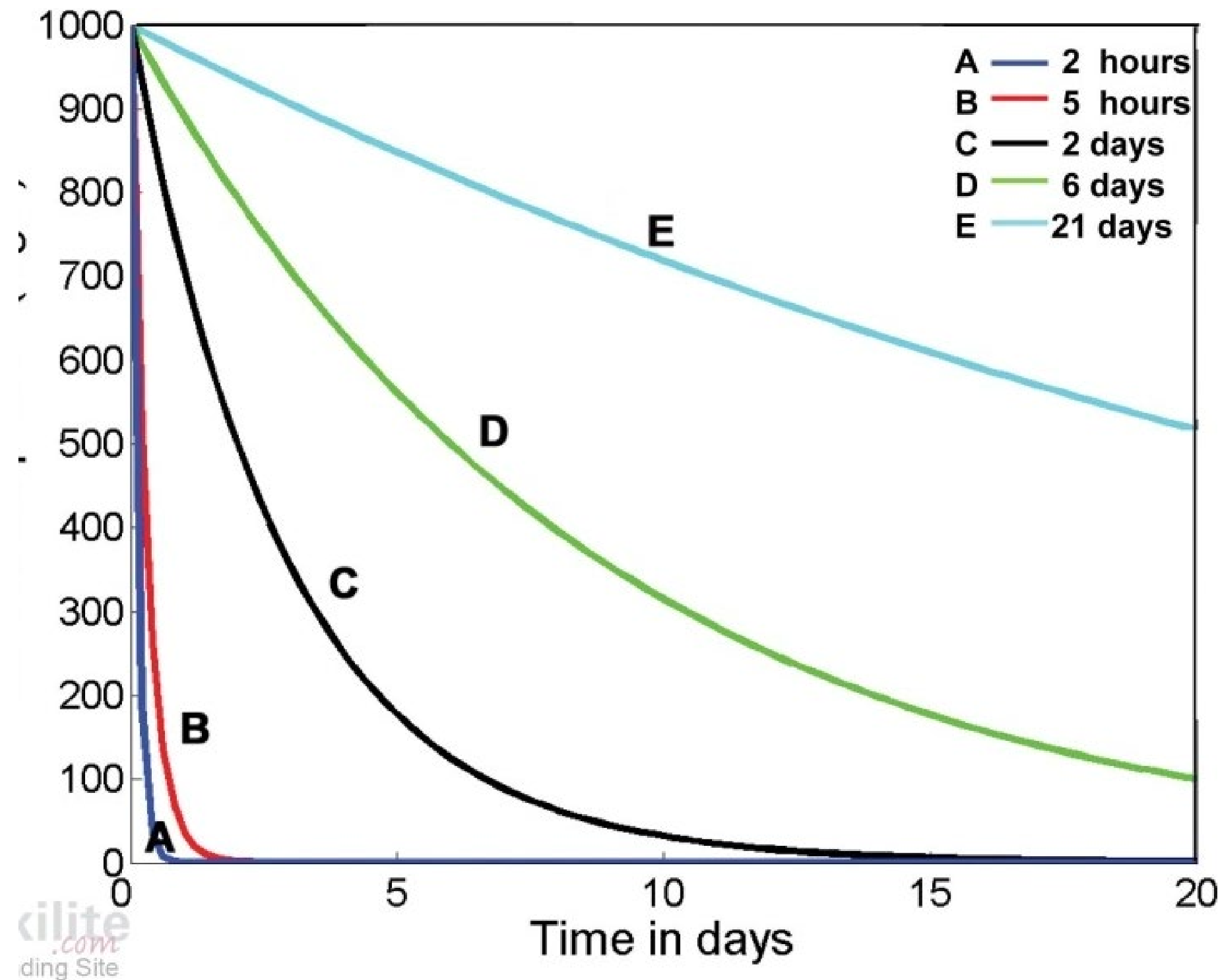
Start the presentation to see live content. For screen share software, share the entire screen. Get help at **pollev.com/app**

Benzodiazepine Dose Equivalency

Dose Equivalents

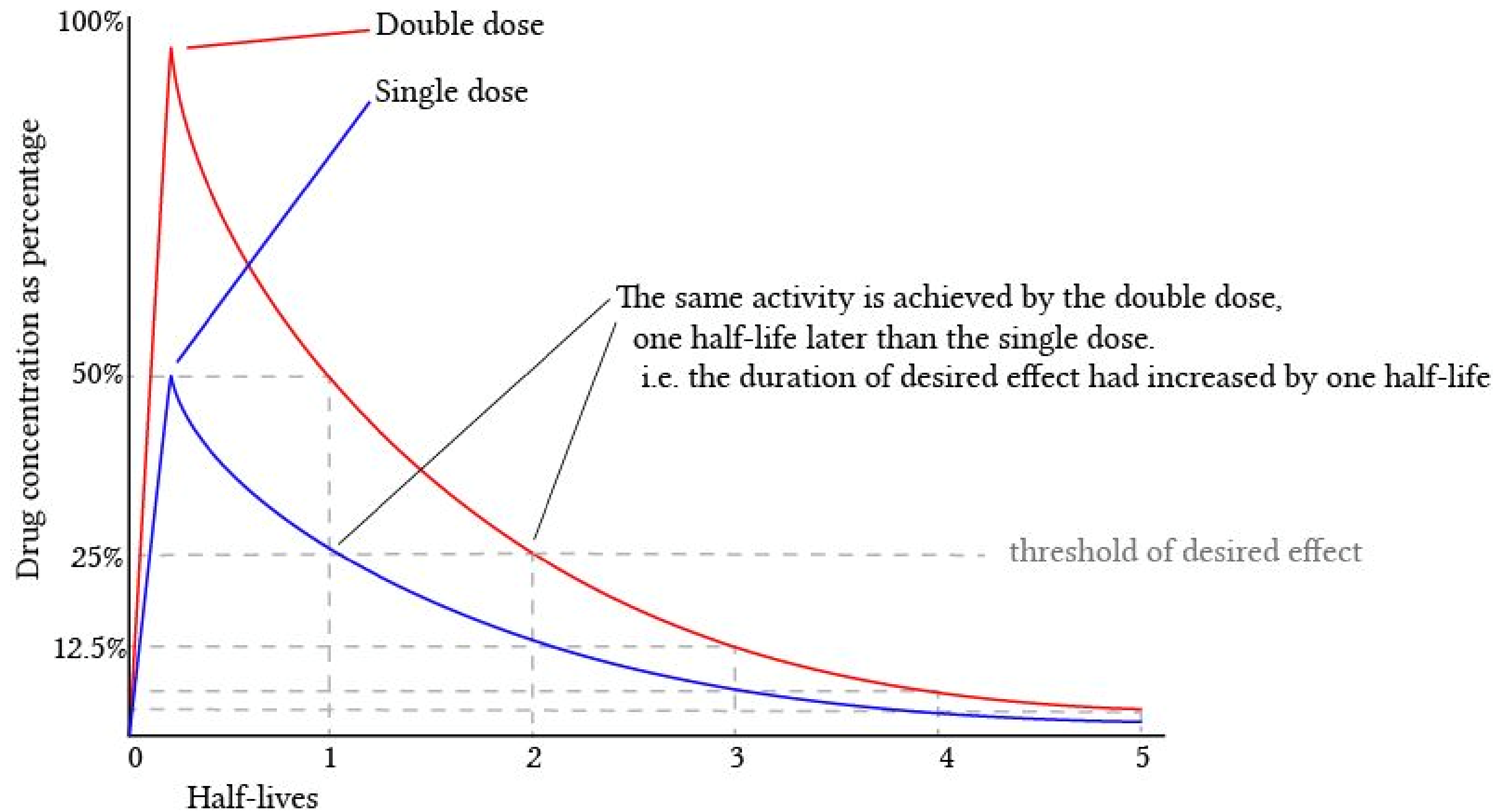
Drug	Daily range mg	Equiv 5mg diazepam.	Duration (½ life)
alprazolam	1 – 4	0.5 - 1	Short/Intermediate
bromazepam	6 – 9	3 – 6	Short/Intermediate
clobazam	30 – 80	10	Intermediate
clonazepam	4 – 8	0.5	Intermediate
diazepam	5 – 20	5	Long
flunitrazepam	0.5 – 2	1 – 2	Intermediate
lorazepam	2 – 4	1	Short/Intermediate
nitrazepam	5 – 20	5 – 10	Intermediate
oxazepam	45 – 90	15 – 30	Short
temazepam	10 – 30	10 - 20	Short
triazolam	0.125 - 0.25	0.25	Short
buspirone*	15 – 30	-	Short
zopiclone*	3.75 - 7.5	-	Short

The Importance of Half - Life



META PHI
MENTORING, EDUCATION, AND CLINICAL TOOLS FOR ADDICTION
PARTNERS IN HEALTH INTEGRATION

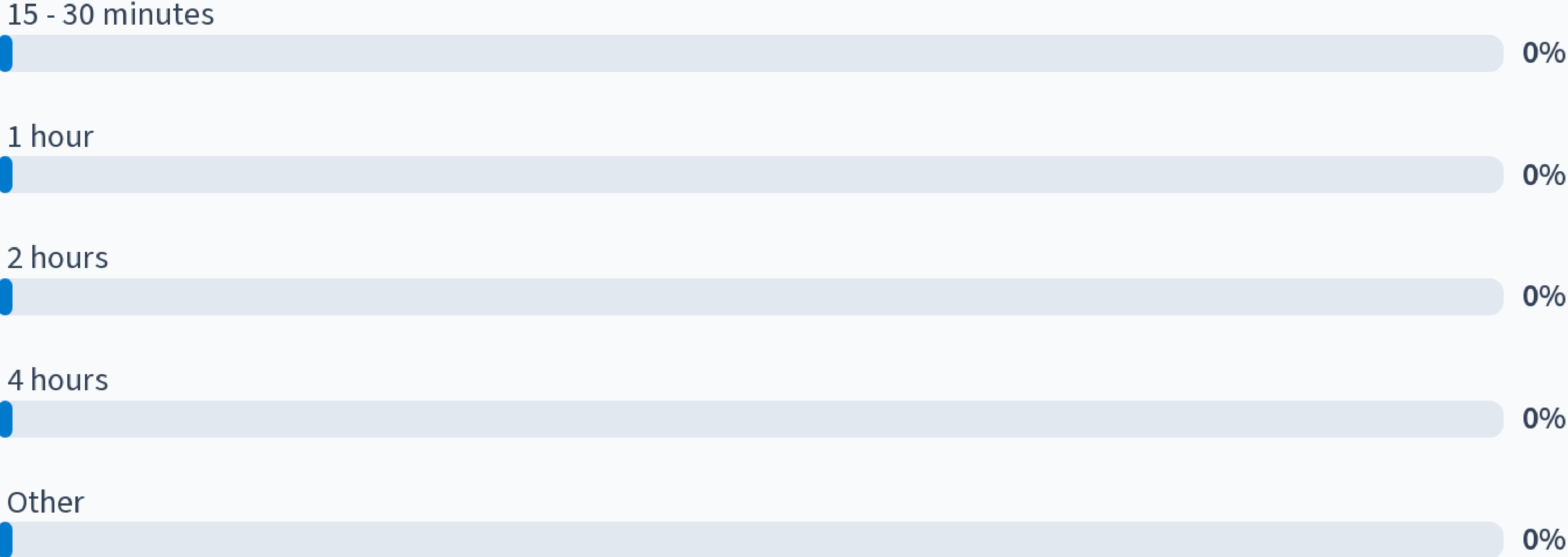
The Importance of Adequate Dosing



Benzodiazepines

- Drugs of first choice for AWS
- GABA receptor agonists – net effect is CNS depression
- It is important to choose the right drug
  - Pop Up: You are tasked with treating a patient with moderate to severe AWS. Which Benzo would you use?
- Timing of medication administration
  - How soon should you go back to reassess your patient after their first dose

How soon should you reassess your patient after an IV dose of diazepam?



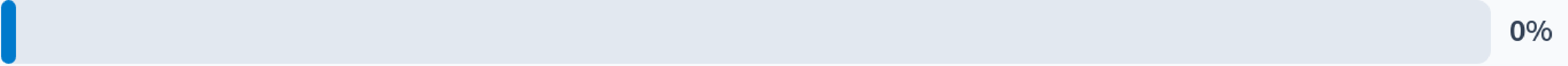
Start the presentation to see live content. For screen share software, share the entire screen. Get help at **pollev.com/app**

Benzodiazepines

- Drugs of first choice for AWS
- GABA receptor agonists – net effect is CNS depression
- It is important to choose the right drug
  - Pop Up: You are tasked with treating a patient with moderate to severe AWS. Which Benzo would you use?
- Timing of medication administration
  - How soon should you go back to reassess your patient after their first dose
    - 15-30 minutes
    - 1 hour
    - 2 hours
    - 4 hours
- How aggressively should I dose my benzodiazepine treatment?
  - Pop up

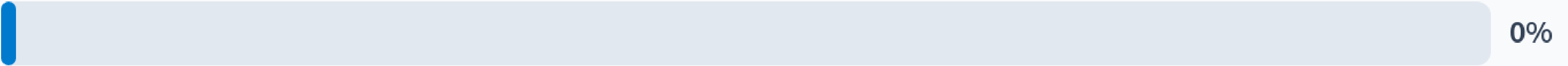
How aggressively should I treat patients with benzodiazepines?

I am worred about over sedation. I prefer to start with a low dose and go slowly



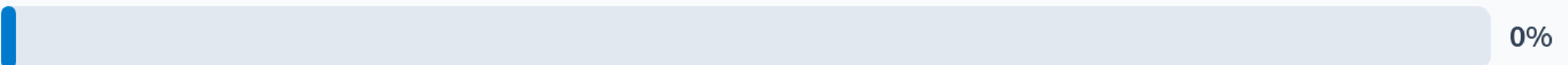
0%

I want to get on top of the withdrawal. I want to treat aggressively with enough medication to see results quickly



0%

I don’t know



0%

Start the presentation to see live content. For screen share software, share the entire screen. Get help at **pollev.com/app**

Phenobarbital

- Barbiturates are the drug of choice for acute AWS WHICH IS NOT RESPONDING to adequate benzodiazepine administration (appropriate dose, frequent re-assessments and treatment)
- Phenobarbital works well for the management of AWS
  - Prolonged effect on GABA receptor chloride channel opening – CNS depression
  - Simultaneously effects glutamate receptors (decreased activity) – reduces CNS excitation
- The main issue with phenobarbital is a narrow therapeutic index

You have been treating an AWS patient for 4 hours. At what TOTAL dose of diazepam would you consider them to be a "non-responder"

Nobody has responded yet.

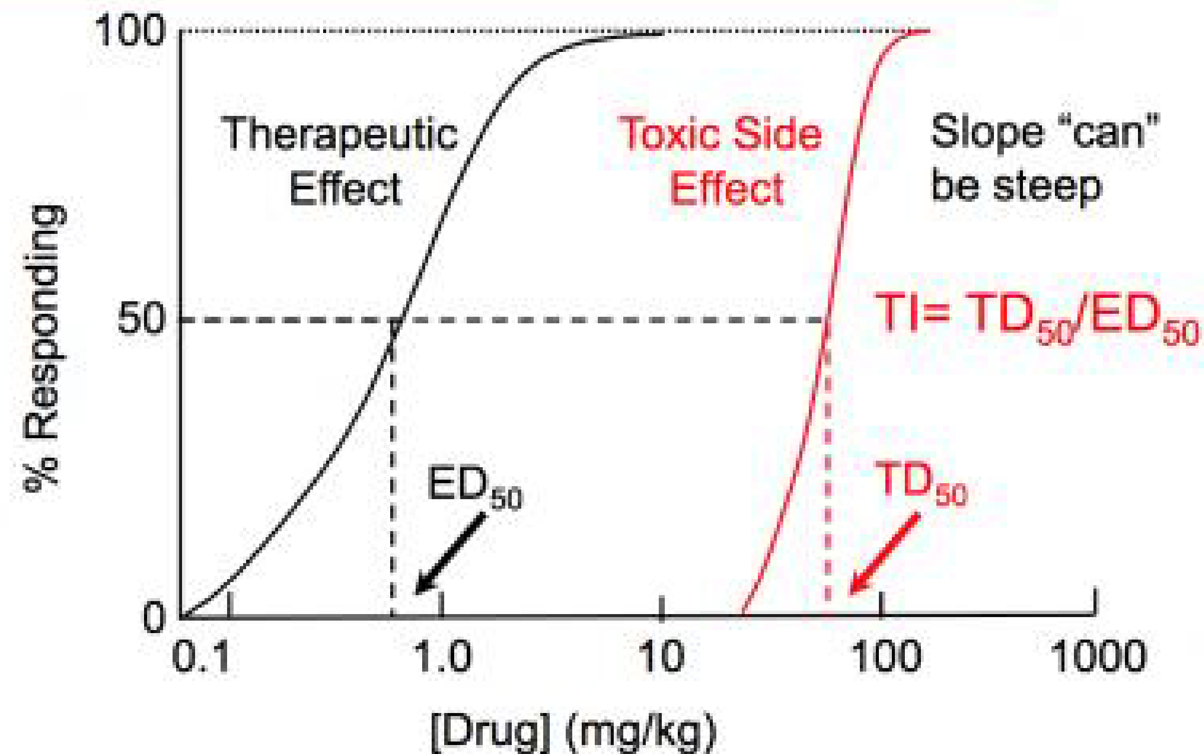
Hang tight! Responses are coming in.

Start the presentation to see live content. For screen share software, share the entire screen. Get help at **pollev.com/app**

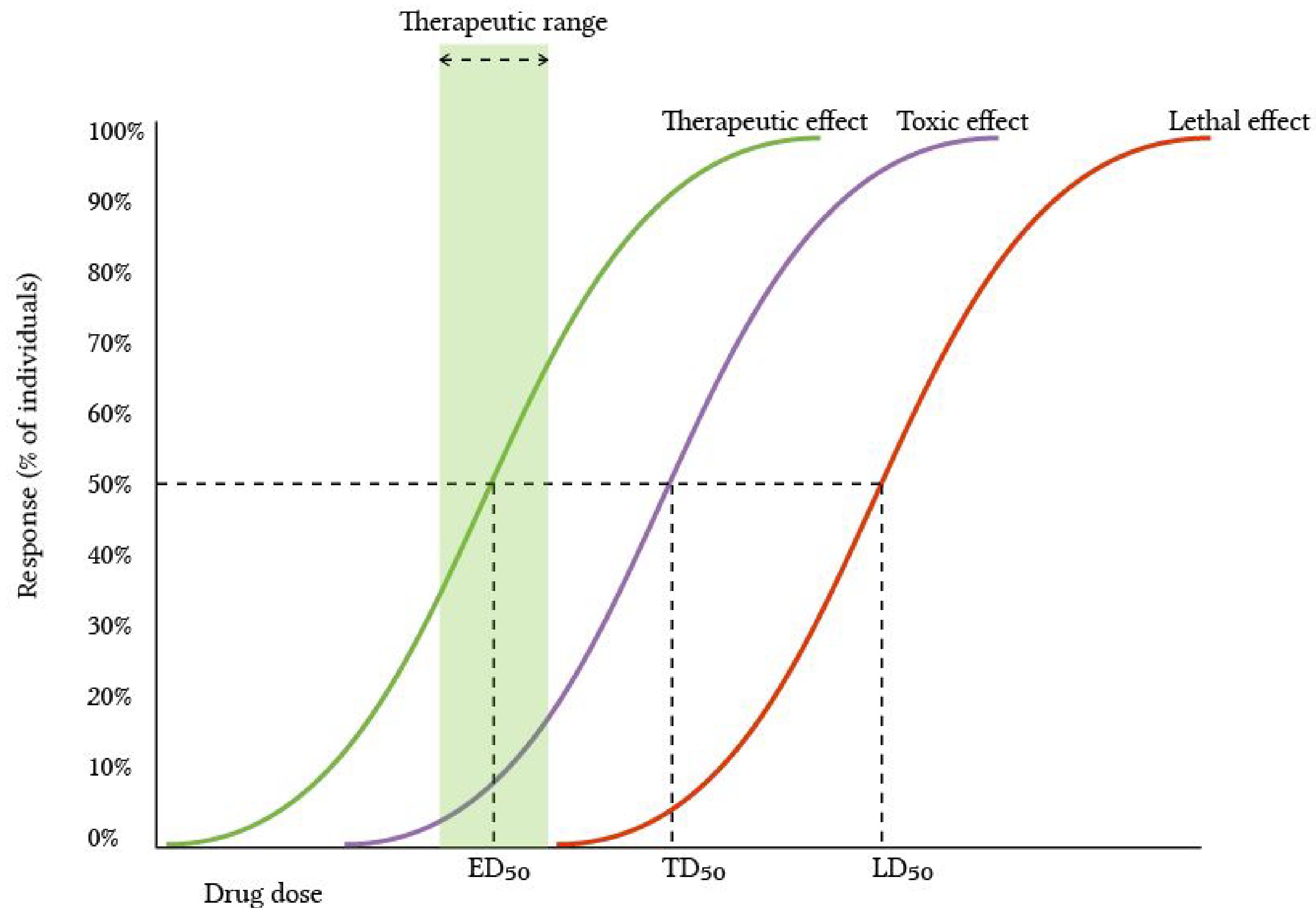
Phenobarbital

- Barbiturates are the drug of choice for acute AWS WHICH IS NOT RESPONDING to adequate benzodiazepine administration (appropriate dose, frequent re-assessments and treatment)
- Phenobarbital works well for the management of AWS
  - Prolonged effect on GABA receptor chloride channel opening – CNS depression
  - Simultaneously effects glutamate receptors (decreased activity) – reduces CNS excitation
- The main issue with phenobarbital is a narrow therapeutic index

Therapeutic Index



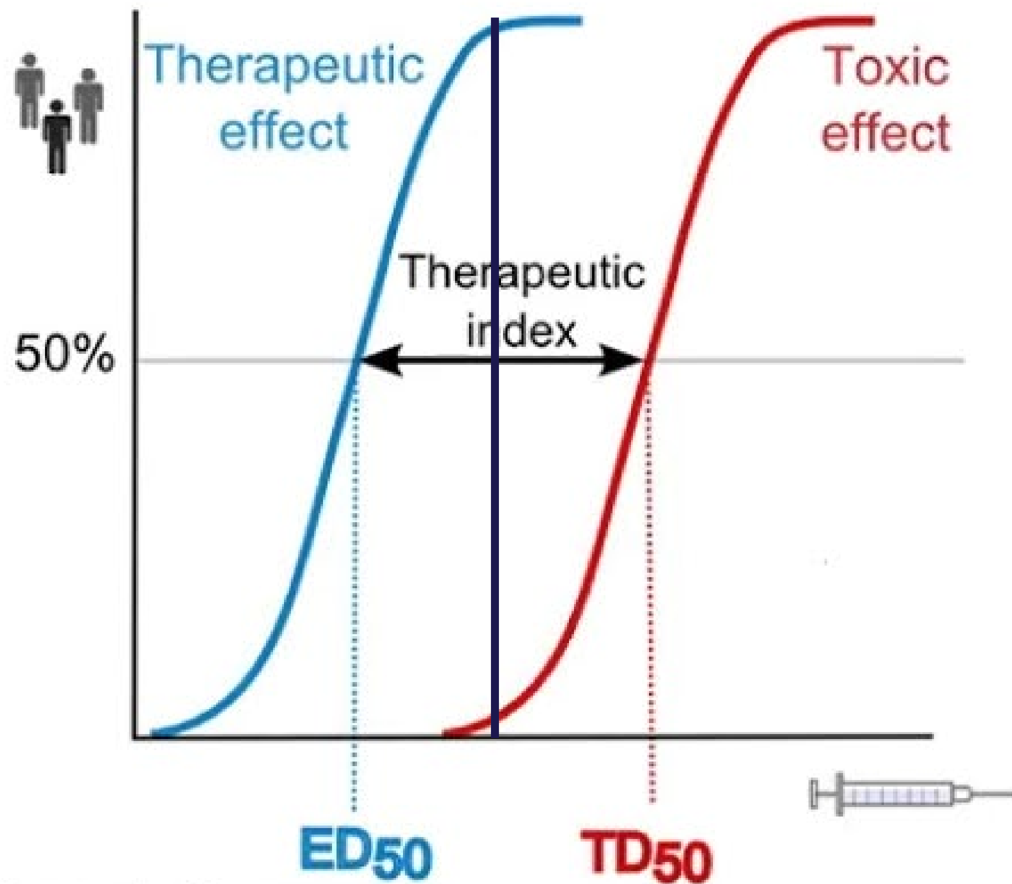
Therapeutic Index



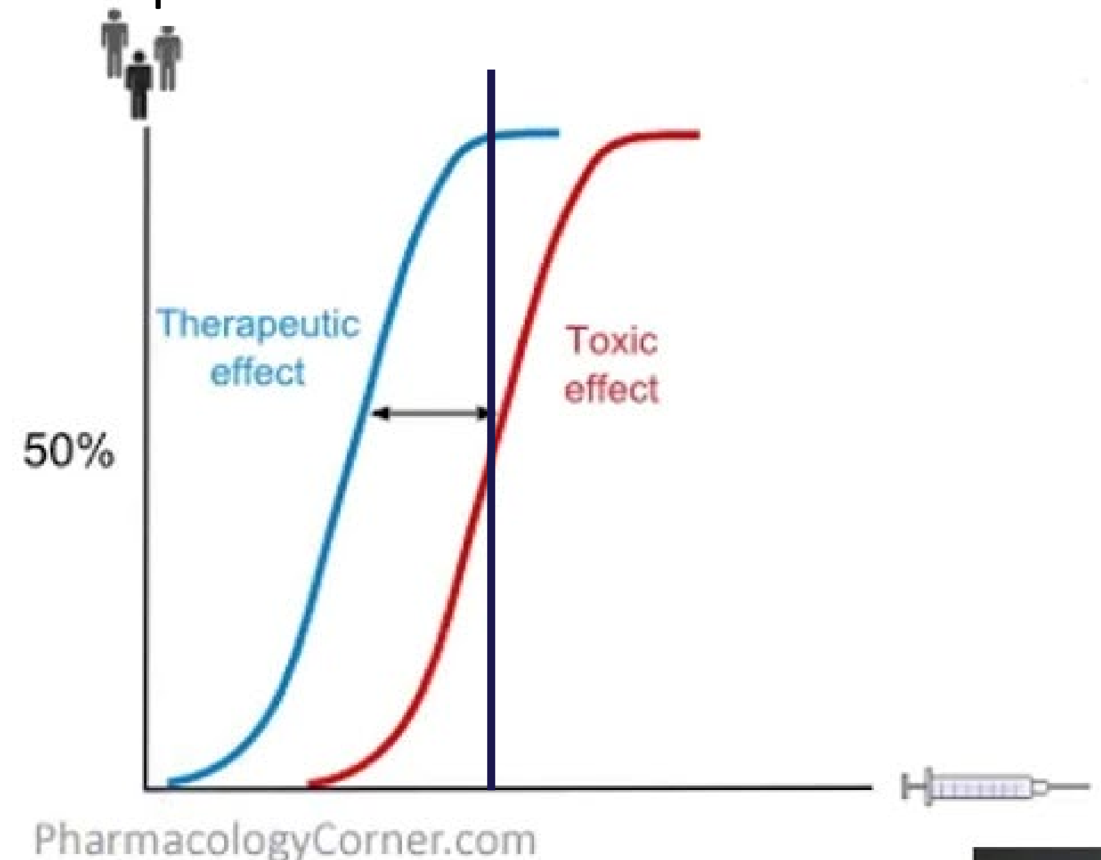
METAPHI
MENTORING, EDUCATION, AND CLINICAL TOOLS FOR ADDICTION
PARTNERS IN HEALTH INTEGRATION

Therapeutic Index - Wide

Wide Therapeutic Index e.g. diazepam



Narrow Therapeutic Index e.g. phenobarbital



https://doi.org/10.1177/02611929211994754

MENTORING, EDUCATION, AND CLINICAL TOOLS FOR ADDICTION
PARTNERS IN HEALTH INTEGRATION

Phenobarbital

- Barbiturates are the drug of choice for acute AWS WHICH IS NOT RESPONDING to adequate benzodiazepine administration
- Phenobarbital is very effective for the management of AWS
  - Prolonged effect on GABA receptor chloride channel opening – CNS depression
  - Simultaneously effects glutamate receptors (decreased activity) – reduces CNS excitation
- The main issue with phenobarbital is a narrow therapeutic index
- Pop up – when should
  - Please enter a total dose I consider my patient a non-responder to benzodiazepines?

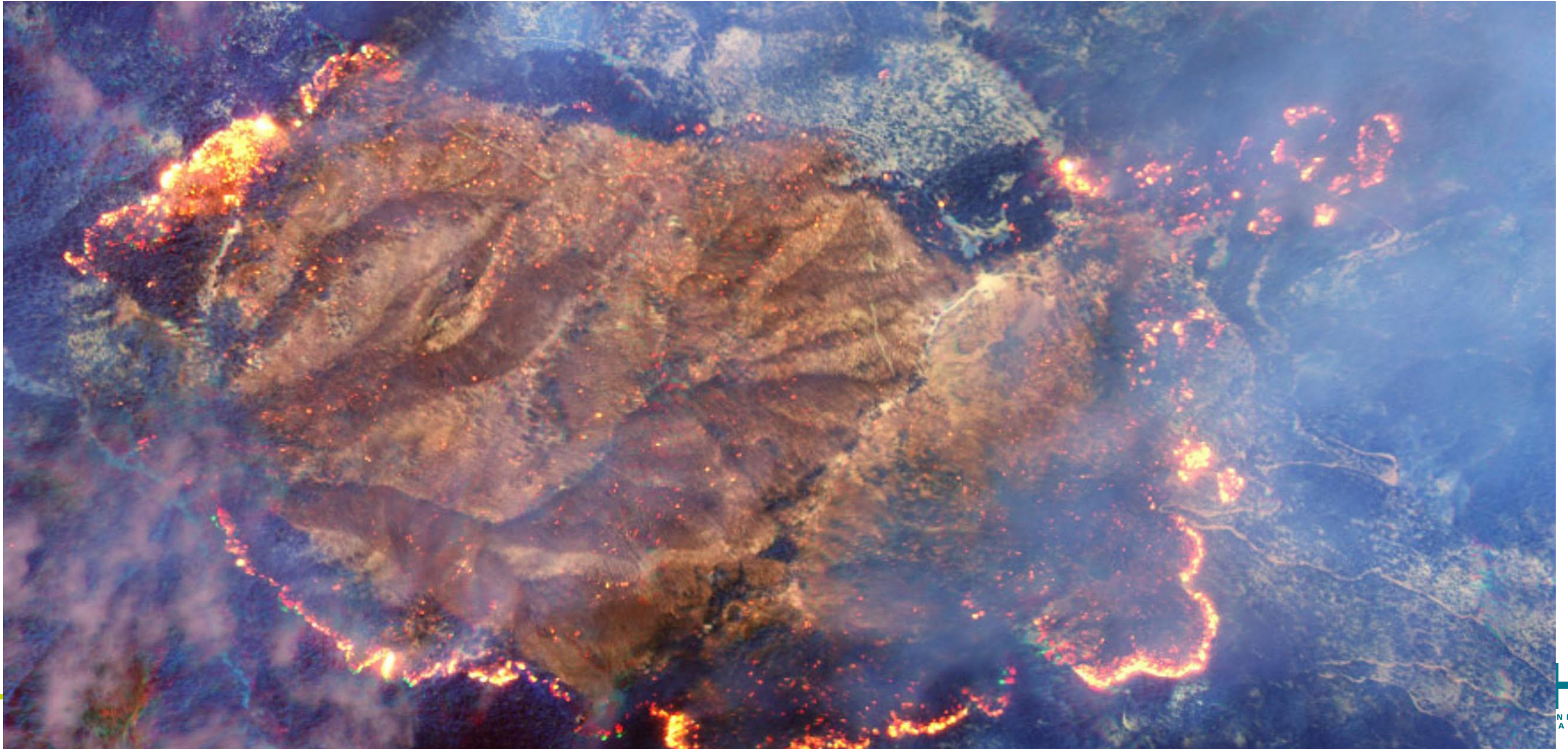
Phenobarbital

- Barbiturates are the drug of choice for acute AWS WHICH IS NOT RESPONDING to adequate benzodiazepine administration
- Phenobarbital is very effective for the management of AWS
  - Prolonged effect on GABA receptor chloride channel opening – CNS depression
  - Simultaneously effects glutamate receptors (decreased activity) – reduces CNS excitation
- The main issue with phenobarbital is a narrow therapeutic index
- Pop up – when should I consider my patient a non-responder to benzodiazepines?
  - More than 40 mg over 4 hours
  - More than 80 mg after 4 hours
  - More than 120 mg after 4 hours
- The definition of "benzodiazepine resistant AWS" has not been clearly agreed upon

General Principals of AWS Management

- The best analogy for managing AWS is to imagine it like a forest fire just getting started
- Do not sleep on patients with early withdrawal symptoms. As with any fire, things can progress rapidly and quickly get out of control (seizures, delirium)
- Patients with uncomplicated early withdrawal who are properly managed can usually be sent home
- If you use the wrong drugs, delay treatment or treat inadequately, you will greatly complicate things

Wrong Management



General Principals of AWS Management

- The use of aggressive symptom guided treatment results in:
  - Faster symptom resolution
  - Fewer complications
  - Lower admission rate
  - Lower ICU admission rate

Thank you

bjug.borgundvaag@sinaihealth.ca

Alcohol Withdrawal Assessment

Alcohol Withdrawal

- Life threatening
- Most serious form is Delirium Tremens (DTs)

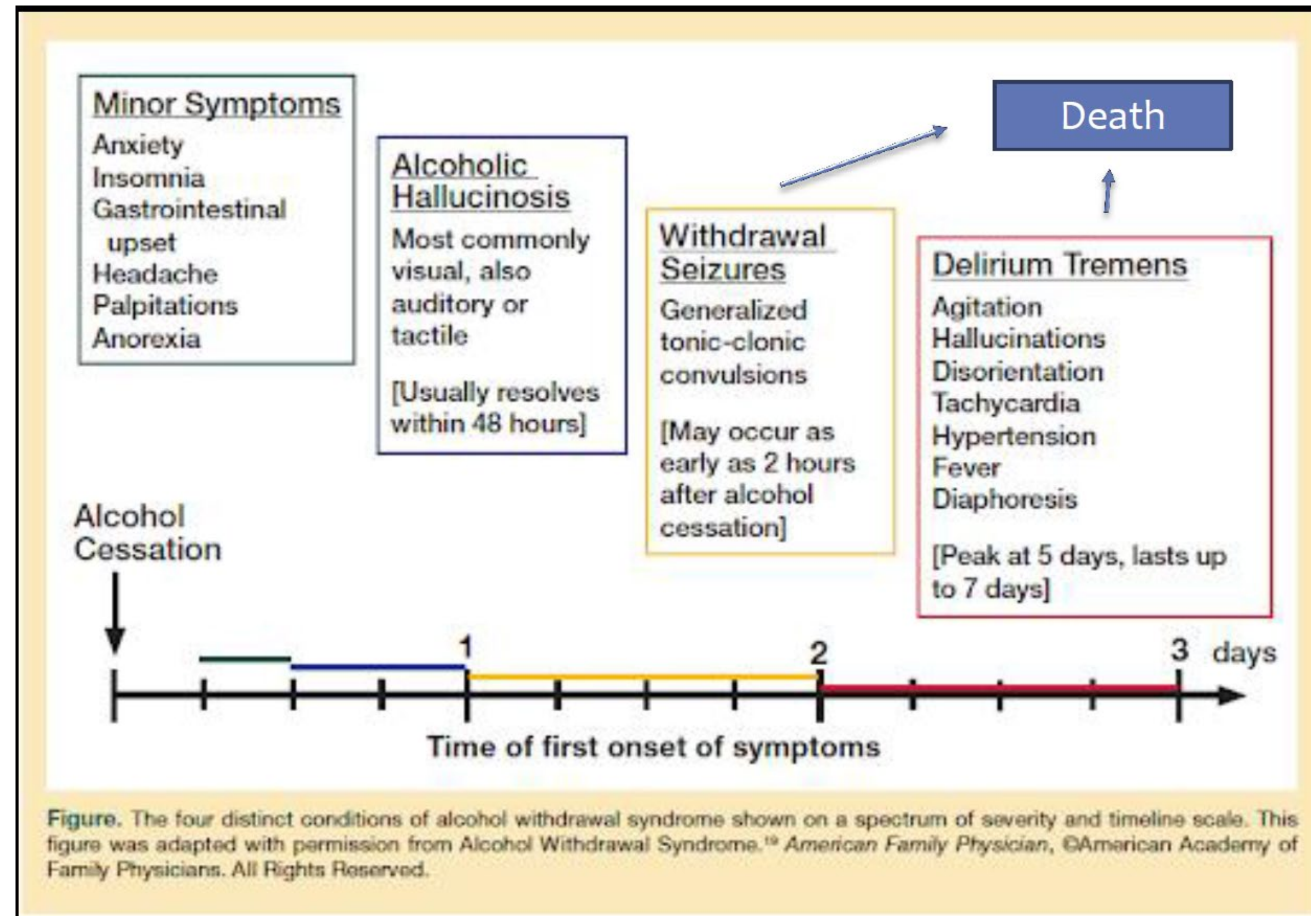


Figure. The four distinct conditions of alcohol withdrawal syndrome shown on a spectrum of severity and timeline scale. This figure was adapted with permission from Alcohol Withdrawal Syndrome.[19] *American Family Physician*, ©American Academy of Family Physicians. All Rights Reserved.

META PHI
MENTORING, EDUCATION, AND CLINICAL TOOLS FOR ADDICTION
PARTNERS IN HEALTH INTEGRATION

Safe Space

Harm & Stigma Reduction = Changing our Language

Due to stigma and negative connotation of ‘alcoholic’ remember to use ‘alcohol use disorder’ (AUD) when speaking with your patient and documenting.

Pearls of Recognizing Alcohol Withdrawal

This is most likely in a person that reports heavy daily alcohol consumption with a recent reduction in use. Withdrawal patterns repeat themselves. If they have had severe withdrawal before, they are likely to have it again.

Signs, Symptom:

- Nausea and/or Vomiting
- Tremors
- Anxiety and/or Agitation
- Paroxysmal Sweats
- Disorientation
- Tactile, Auditory, and/or Visual Disturbances
- Headache

Clinical Institute Withdrawal Assessment for Alcohol–Revised (CIWA-Ar)

Assess and rate each of the following (CIWA-Ar Scale):

Nausea/vomiting (0 - 7)
0 - none; 1 - mild nausea, no vomiting; 4 - intermittent nausea; 7 - constant nausea, frequent dry heaves & vomiting.

Tremors (0 - 7)
0 - no tremor; 1 - not visible but can be felt; 4 - moderate w/arms extended; 7 - severe, even w/ arms not extended.

Anxiety (0 - 7)
0 - none, at ease; 1 - mildly anxious; 4 - moderately anxious or guarded; 7 - equivalent to acute panic state

Agitation (0 - 7)
0 - normal activity; 1 - somewhat normal activity; 4 - moderately fidgety/restless; 7 - paces or constantly thrashes about

Paroxysmal Sweats (0 - 7)
0 - no sweats; 1 - barely perceptible sweating, palms moist; 4 - beads of sweat obvious on forehead; 7 - drenching sweat

Orientation (0 - 4)
0 - oriented; 1 - uncertain about date; 2 - disoriented to date by no more than 2 days; 3 - disoriented to date by > 2 days; 4 - disoriented to place and / or person

Tactile Disturbances (0 - 7)
0 - none; 1 - very mild itch, P&N, ,numbness; 2-mild itch, P&N, burning, numbness; 3 - moderate itch, P&N, burning, numbness; 4 - moderate hallucinations; 5 - severe hallucinations; 6 – extremely severe hallucinations; 7 - continuous hallucinations

Auditory Disturbances (0 - 7)
0 - not present; 1 - very mild harshness/ ability to startle; 2 - mild harshness, ability to startle; 3 - moderate harshness, ability to startle; 4 - moderate hallucinations; 5 severe hallucinations; 6 - extremely severe hallucinations; 7 - continuous hallucinations

Visual Disturbances (0 - 7)
0 - not present; 1 - very mild sensitivity; 2 - mild sensitivity; 3 - moderate sensitivity; 4 - moderate hallucinations; 5 - severe hallucinations; 6 - extremely severe hallucinations; 7 - continuous hallucinations

Headache (0 - 7)
0 - not present; 1 - very mild; 2 - mild; 3 - moderate; 4 - moderately severe; 5 - severe; 6 - very severe; 7 - extremely severe

Alcohol Withdrawal Assessment Scoring Guidelines (CIWA - Ar)

Nausea/Vomiting - Rate on scale 0 - 7

0 - None
1 - Mild nausea with no vomiting
2
3
4 - Intermittent nausea
5
6
7 - Constant nausea and frequent dry heaves and vomiting

Tremors - have patient extend arms & spread fingers. Rate on scale 0 - 7.
0 - No tremor
1 - Not visible, but can be felt fingertip to fingertip
2
3
4 - Moderate, with patient's arms extended
5
6
7 - severe, even w/ arms not extended

Anxiety - Rate on scale 0 - 7

0 - no anxiety, patient at ease
1 - mildly anxious
2
3
4 - moderately anxious or guarded, so anxiety is inferred
5
6
7 - equivalent to acute panic states seen in severe delirium or acute schizophrenic reactions.

Agitation - Rate on scale 0 - 7

0 - normal activity
1 - somewhat normal activity
2
3
4 - moderately fidgety and restless
5
6
7 - paces back and forth, or constantly thrashes about

Paroxysmal Sweats - Rate on Scale 0 - 7.

0 - no sweats
1- barely perceptible sweating, palms moist
2
3
4 - beads of sweat obvious on forehead
5
6
7 - drenching sweats

Orientation and clouding of sensorium - Ask, "What day is this? Where are you? Who am I?" Rate scale 0 - 4
0 - Oriented
1 – cannot do serial additions or is uncertain about date
2 - disoriented to date by no more than 2 calendar days
3 - disoriented to date by more than 2 calendar days
4 - Disoriented to place and / or person

Tactile disturbances - Ask, "Have you experienced any itching, pins & needles sensation, burning or numbness, or a feeling of bugs crawling on or under your skin?"
0 - none
1 - very mild itching, pins & needles, burning, or numbness
2 - mild itching, pins & needles, burning, or numbness
3 - moderate itching, pins & needles, burning, or numbness
4 - moderate hallucinations
5 - severe hallucinations
6 - extremely severe hallucinations
7 - continuous hallucinations

Auditory Disturbances - Ask, "Are you more aware of sounds around you? Are they harsh? Do they startle you? Do you hear anything that disturbs you or that you know isn't there?"
0 - not present
1 - Very mild harshness or ability to startle
2 - mild harshness or ability to startle
3 - moderate harshness or ability to startle
4 - moderate hallucinations
5 - severe hallucinations
6 - extremely severe hallucinations
7 - continuous hallucinations

Visual disturbances - Ask, "Does the light appear to be too bright? Is its colour different than normal? Does it hurt your eyes? Are you seeing anything that disturbs you or that you know isn't there?"
0 - not present
1 - very mild sensitivity
2 - mild sensitivity
3 - moderate sensitivity
4 - moderate hallucinations
5 - severe hallucinations
6 - extremely severe hallucinations
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.

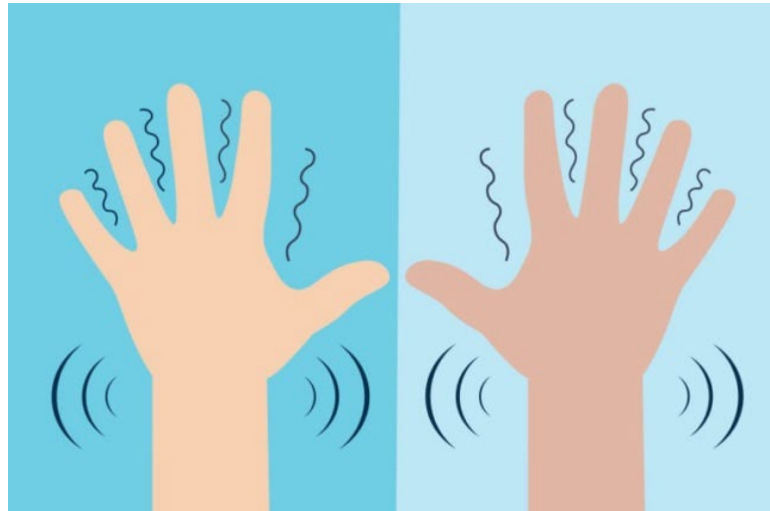
0 - not present
1 - very mild
2 - mild
3 - moderate
4 - moderately severe
5 - severe
6 - very severe
7 - extremely severe

Wake the Patient!

Always wake the patient for the assessment. Withdrawal can progress while sleeping. If not fully awake, scoring may be low while withdrawal symptoms are actually more severe.

Tremor

Alcohol withdrawal **tremor** is a postural-type tremor that occurs in the hands. It is not a resting tremor, as is seen in Parkinson’s. In an alcohol withdrawal tremor, with the arms extended and fingers spread, you will see a tremor that is constant and does not fatigue.



CIWA-Ar Category Tips for Accurately Scoring

Nausea/vomiting (0 - 7)
0 - none
1 - mild nausea, no vomiting
4 - intermittent nausea
7 - constant nausea , frequent dry heaves & vomiting

Ask: "Do you feel sick to your stomach? Have you vomited?"

Examples:
Score 2: client may rate their nausea severe, but appear comfortable and are eating and drinking well
Score 5: client reports nausea, has a bin/bag ready in case of vomiting, and may request an antiemetic

Case Example

Please score the patient who is complaining of:

nausea & is actively vomiting

Reminder

Nausea/vomiting (0 - 7)

0 - none
1 - mild nausea, no vomiting
4 - intermittent nausea
7 - constant nausea , frequent dry heaves & vomiting

CIWA-Ar Category Tips for Accurately Scoring

Tremors (0 - 7)
0 - no tremor
1 - not visible but can be felt
4 - moderate w/ arms extended
7 - severe, even w/ arms not extended

Ask: "Hold your arms out in front of you and spread your fingers apart."

Examples:
"Hold this glass of water in front of you, and then take a drink from it"
0 – able to complete task without tremor
1 or 2 – able to complete the task with fine tremor noticed
3 or 4 – able to complete the task with difficulty or some spilling, noticeable tremor
5 or 6 – difficulty completing the task, two hands used to hold the cup
7 – unable to complete the task, water may be spilt when holding the cup

Case Example

Please score the patient who is:

obviously tremulous with outstretched arms

Reminder

Tremors (0 - 7)
0 - no tremor
1 - not visible but can be felt
4 - moderate w/ arms extended
7 - severe, even w/ arms not extended

CIWA-Ar Category Tips for Accurately Scoring

Anxiety (0 - 7)
0 - none, at ease
1 - mildly anxious
4 - moderately anxious or guarded
7 - equivalent to acute panic state

Ask: “On a scale 0-7, 0 = being calm and 7 = being a panic attack, how anxious are you feeling?”

Examples:
Score 2 – client rates anxiety is severe, but they appear calm and are cooperative, normal

Case Example

Please score the patient who is complaining of feeling:
as though they are about to have a panic attack

Reminder

Anxiety (0 - 7)
0 - none, at ease
1 - mildly anxious
4 - moderately anxious or guarded
7 - equivalent to acute panic state

CIWA-Ar Category Tips for Accurately Scoring

Agitation (0 - 7)

0 - normal activity

1 - somewhat normal activity

4 - moderately fidgety/restless

7 - paces or constantly thrashes about

*Though you may ask if they feel agitated, this is best observed in their activities

Case Example

Please score the patient who is:

<u>pacing around the room and wringing their hands</u>

Reminder

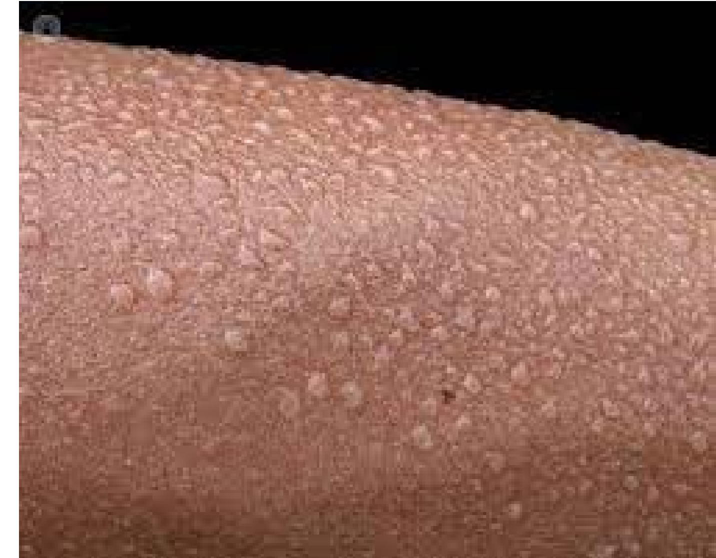
Agitation (0 - 7)
0 - normal activity
1 - somewhat normal activity
4 - moderately fidgety/restless
7 - paces or constantly thrashes about

CIWA-Ar Category Tips for Accurately Scoring

Paroxysmal Sweats (0 - 7)
0 - no sweats
1 - barely perceptible sweating, palms moist
4 - beads of sweat obvious on forehead
7 - drenching sweat

*Paroxysmal means occurring periodically. If a client is actively sweating, document the severity. If a client is not actively sweating, document what they describe as their severity

Examples:
Score 5 - "I was sweating on and off all night long" But not actively sweating
Score 7 – Beads of sweat visible on forehead, shirt/gown drench due to active sweating.



Case Example

Please score the patient who has:

obvious beads of sweat on their forehead

Reminder

Paroxysmal Sweats (0 - 7)
0 - no sweats
1 - barely perceptible sweating, palms moist
4 - beads of sweat obvious on forehead
7 - drenching sweat

CIWA-Ar Category Tips for Accurately Scoring

Orientation (0 - 4)

0 - oriented

1 - uncertain about date

2 - disoriented to date by no more than 2 days

3 - disoriented to date by > 2 days

4 - disoriented to place and / or person

Ask: "Who am I? What year is it? Where are you right now?"

Case Example

Please score the patient who is:

confused about the date

Reminder

Orientation (0 - 4)
0 - oriented
1 - uncertain about date
2 - disoriented to date by no more than 2 days
3 - disoriented to date by > 2 days
4 - disoriented to place and / or person

CIWA-Ar Category Tips for Accurately Scoring

Tactile Disturbances (0 - 7)
0 - none
1 - very mild itch, P&N
2 - mild itch, burning, P&N
3 - moderate itch, P&N, burning
4 - moderate hallucinations
5 - severe hallucinations
6 - extremely severe hallucinations
7 - continuous hallucinations

Ask: "Do you have any itching, burning, numbness, pins/needles on your skin, that isn't usually there? Do you feel like bugs are crawling on/under your skin?"

Examples:
Score 2 – client may be intermittently itching their skin
Score 5 – seeing bugs on their skin, and continuously itching
Score 7 - disturbed by seeing bugs on their skin and not being able to focus on the conversation

Case Example

Please score the patient who is complaining of:

pins and needles, burning & itching fingers

Reminder

Tactile Disturbances (0 - 7)

0 - none
1 - very mild itch, P&N
2 - mild itch, burning, P&N
3 - moderate itch, P&N, burning
4 - moderate hallucinations
5 - severe hallucinations
6 - extremely severe hallucinations
7 - continuous hallucinations

CIWA-Ar Category Tips for Accurately Scoring

Auditory Disturbances (0 - 7)
0 - not present
1 - very mild harshness/ ability to startle
2 - mild harshness, ability to startle
3 - moderate harshness, ability to startle
4 - moderate hallucinations
5 - severe hallucinations
6 - extremely severe hallucinations
7 – continuous hallucinations

Ask: “Is the sound of my voice bothering you? Are you hearing anything that you know isn’t there?

Examples:
Score 3 - client reports sensitivity and is jumpy to noises like talking or doors shutting
Score 4 – client reports hearing things, but they are not bothered by it
Score 7 – client hears things and is bothered by them

Case Example

Please score the patient who is complaining about:
<u>the sound of your voice and environment</u>

Reminder

Auditory Disturbances (0 - 7)
0 - not present
1 - very mild harshness/ ability to startle
2 - mild harshness, ability to startle
3 - moderate harshness, ability to startle
4 - moderate hallucinations
5 - severe hallucinations
6 - extremely severe hallucinations
7 – continuous hallucinations

CIWA-Ar Category Tips for Accurately Scoring

Visual Disturbances (0 - 7)
0 - not present
1 - very mild sensitivity
2 - mild sensitivity
3 - moderate sensitivity
4 - moderate hallucinations
5 - severe hallucinations
6 - extremely severe hallucinations
7 - continuous hallucinations

Ask: “Are you more bothered by the light than usual? Are you seeing colours differently? Are you seeing anything that you know isn’t there? Are you seeing anything that is frightening or disturbing you?”
Examples:
Score 1 – client complains of bright lights, but appears comfortable
Score 4 – client keeps their eyes closed or covered with hat/glasses
Score 7 - client is seeing other things/people, may be interacting with them, and cannot focus on the conversation

Case Example

Please score the patient who is complaining about:

the light in the room and wearing their sunglasses inside

Reminder

Visual Disturbances (0 - 7)

0 - not present
1 - very mild sensitivity
2 - mild sensitivity
3 - moderate sensitivity
4 - moderate hallucinations
5 - severe hallucinations
6 - extremely severe hallucinations
7 - continuous hallucinations

META:PHI
MENTORING, EDUCATION, AND CLINICAL TOOLS FOR ADDICTION
PARTNERS IN HEALTH INTEGRATION

CIWA-Ar Category Tips for Accurately Scoring

Headache (0 - 7)
0 - not present
1 - very mild
2 - mild
3 - moderate
4 - moderately severe
5 - severe
6 - very severe
7 - extremely severe

Ask: “Does your head feel different? Do you have a tight band around your head? Do have a headache?”
*do not rate dizziness or light-headedness

Examples:
Score 1 – client rates their headache moderate, but shows no discomfort
Score 5 – client reports a severe headache, appears uncomfortable, and may hold their head
Score 7 – client reports severe headache, unable to concentrate, keeps eyes closed, appears in pain, and hold their head

Case Example

Please score the patient who is complaining of:

the worst headache of their life

Reminder

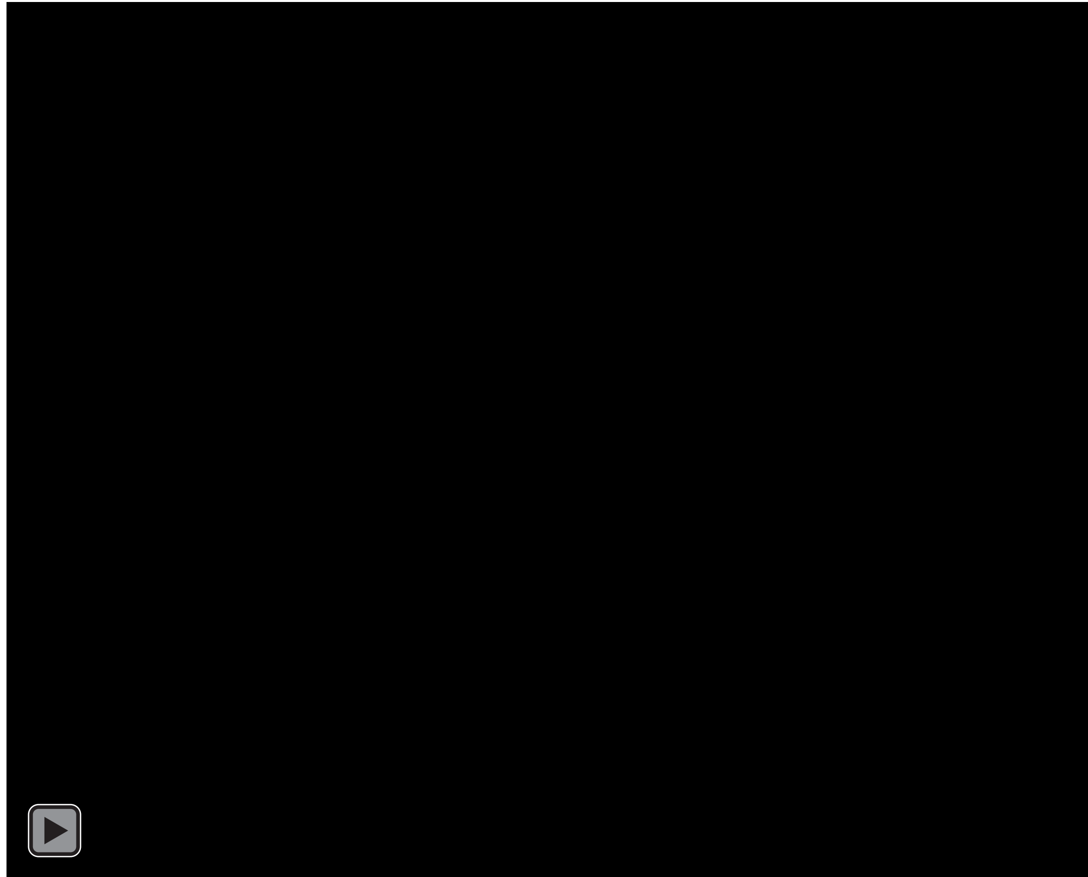
Headache (0 - 7)

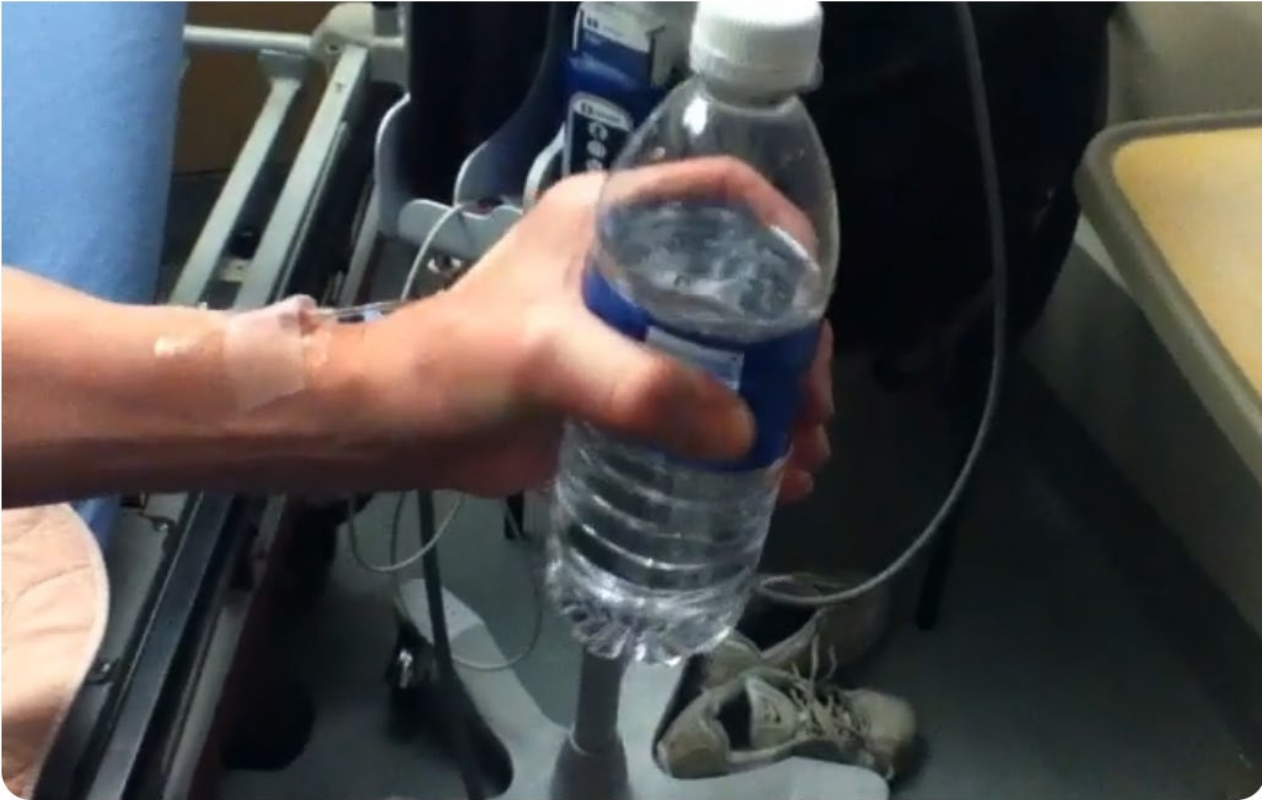
0 - not present
1 - very mild
2 - mild
3 - moderate
4 - moderately severe
5 - severe
6 - very severe
7 - extremely severe

Wake the Patient

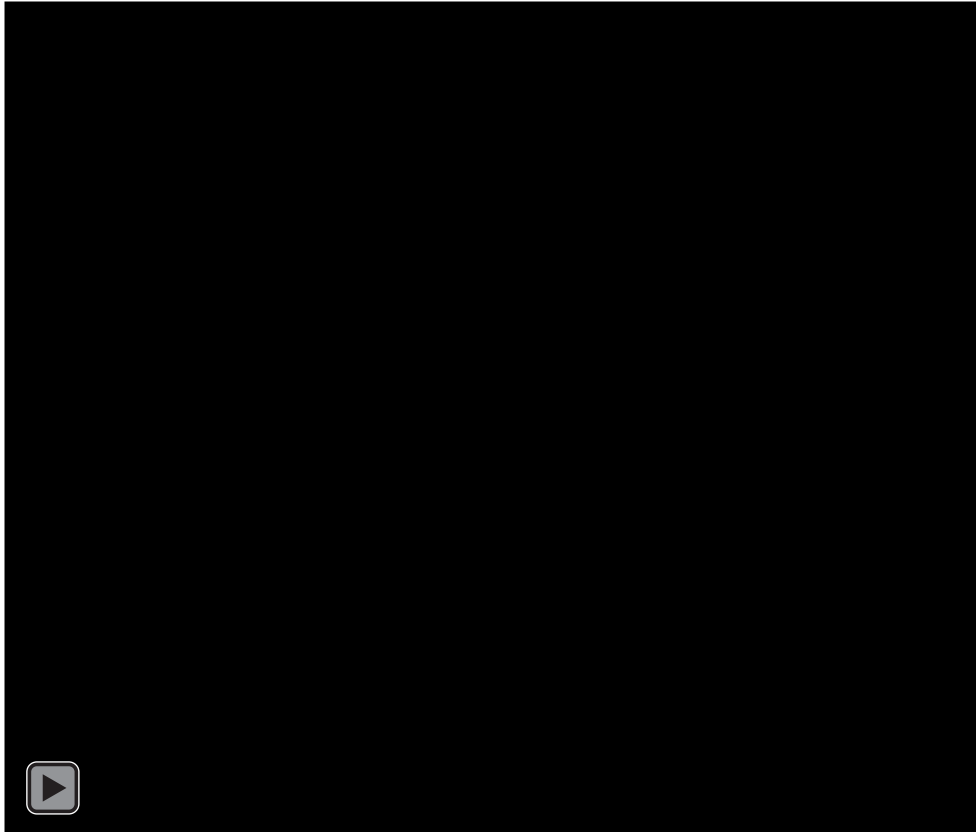
https://youtu.be/_DJMH-gPjW4?si=3TwBqHc6jcdNhPjh

Intentional Tremor

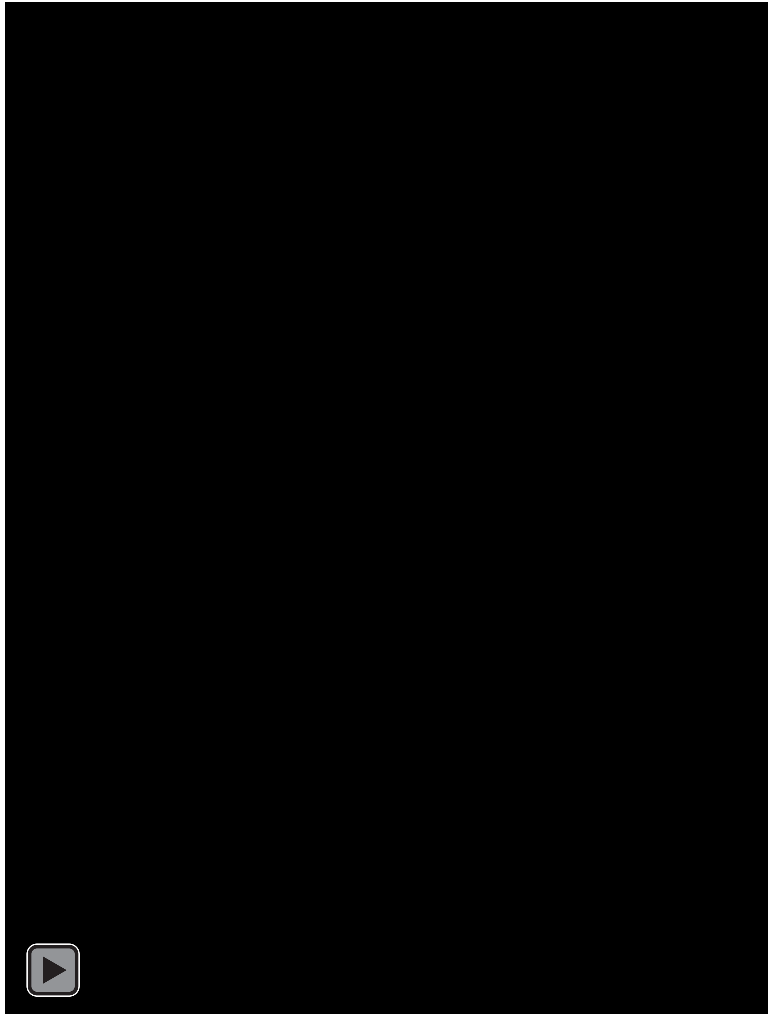




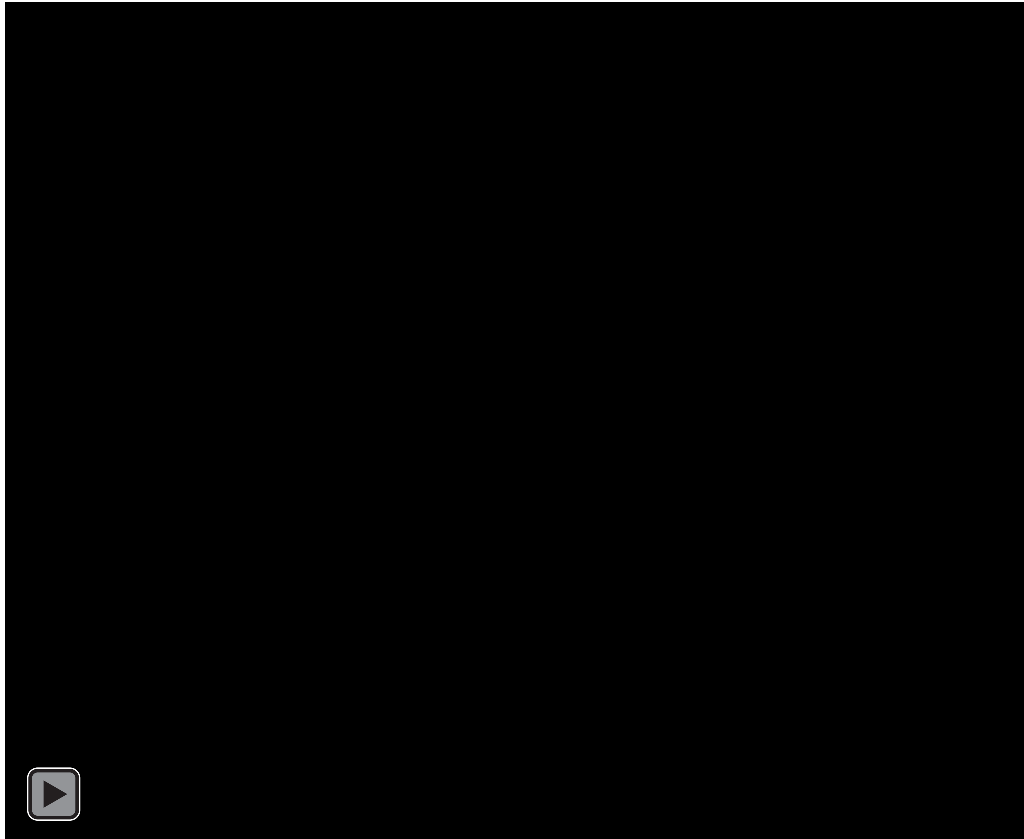
Mild Tremor



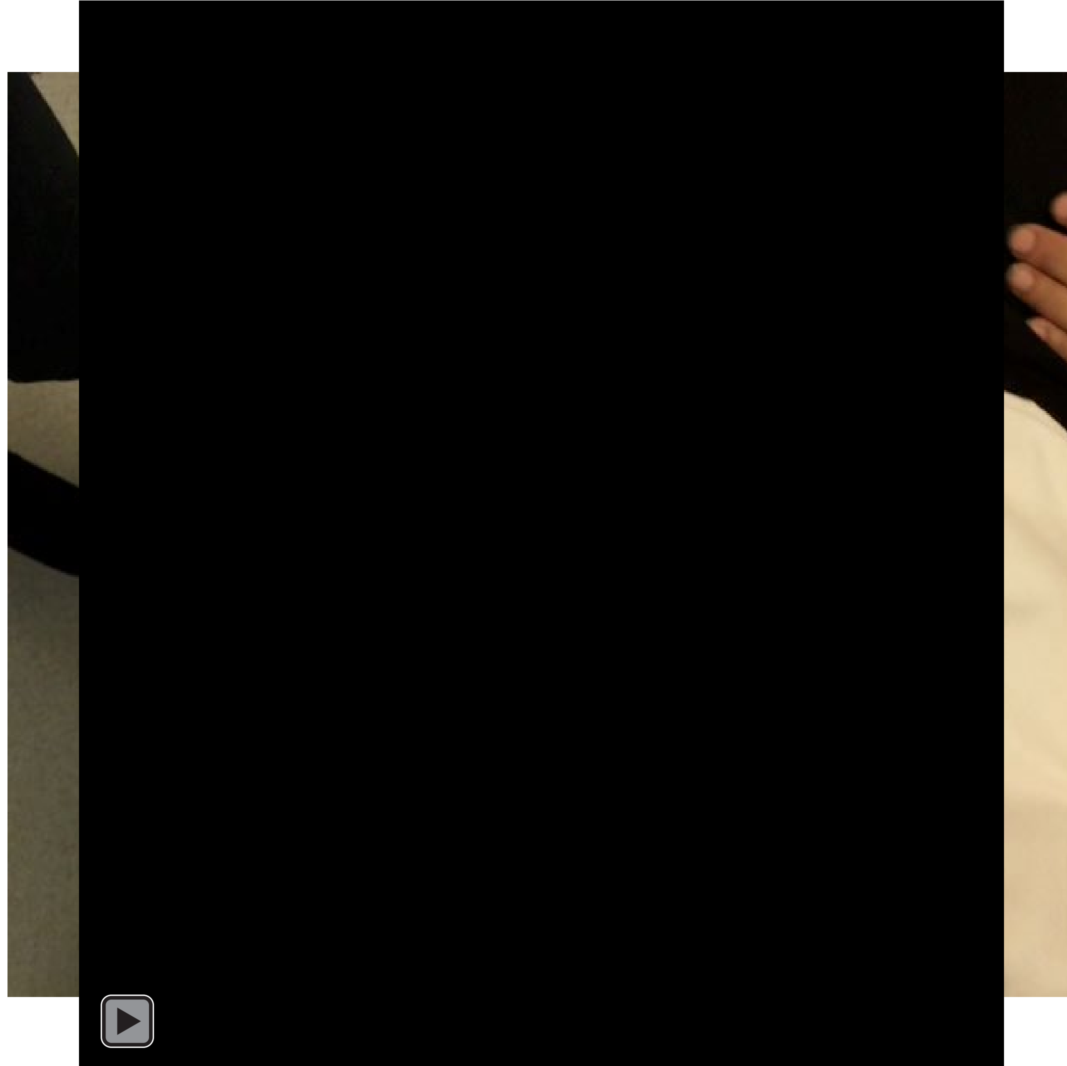
Moderate Tremor



Severe Tremor



Non-Alcohol Withdrawal Tremor



Treat, Monitor & Reassess

Mild CIWA-Ar <10 Mild or moderate anxiety, sweating and insomnia, but no tremor

Moderate CIWA-Ar 10-18 Moderate anxiety, sweating, insomnia, and mild tremor

Severe CIWA-Ar >19 Severe anxiety and moderate to severe tremor, but not confusion, hallucinations, or seizure

Complicated CIWA-Ar >19 signs of delirium, seizure

ED Reassessments:

Mild Withdrawal (CIWA-Ar score less than or equal to 13)	**Moderate withdrawal** (CIWA-Ar score 15–19)	**Severe Withdrawal** (CIWA-Ar score greater than or equal to 20)
Reassess CIWA-Ar score and vital signs **q60–120 mins**	**Reassess** CIWA-Ar score and vital signs **q60 mins**	Reassess CIWA-Ar score and vital signs **q30–60 mins**

META:PHI
MENTORING, EDUCATION, AND CLINICAL TOOLS FOR ADDICTION
PARTNERS IN HEALTH INTEGRATION

Thank you

Kelly.Shillington@sinaihealth.ca

Appropriate Setting

When to transfer to the ED… and when not to

Case 1

A patient calls into your RAAM clinic wanting help to stop drinking. They want to detox at home. They've been in the hospital lots of times for their withdrawal before, and they don't want to go back. They feel the ED does nothing for them anyways. They have a friend that can stay with them this time.

What do you do?

Emergency Department

- If the patient has history of withdrawal complications such as history of hospitalization, seizures, DTs.
- If withdrawal in another setting is planned, but loading doses are required first
  - After loading doses, if symptoms are improving, most patients can discharge to another care setting
- If the patient is on high doses of methadone or opioids
- If the patient has a severe liver, respiratory, or cognitive impairment
- If the patient has concurrent health conditions e.g. pregnancy, pneumonia
- If the patient is frail elderly, or high-risk youth

Transfer to the Emergency Department

- Withdrawal symptoms getting **significantly worse** despite Diazepam 80 mg
- **Definitive signs of severe withdrawal:**

  Signs of autonomic hyperactivity: Profuse sweating, severe tremor, repeat vomiting, SBP > 180 DBP >110, HR > 120 bpm, arrhythmia, T > 37.5 C

  Hallucinations, psychomotor agitation, confusion, disorientation, delusions, withdrawal seizures, DTs

Example vital sign cut offs for transfer to the ED:

- SpO2 < 92% on room air
- RR < 10 OR > 20 breaths/min
- T < 35°C OR > 37.5°C (if provider not on site)
- Irregular pulse or HR < 50 bpm OR > 120 bpm
- Systolic BP ≥180 or diastolic BP ≥110 in acute withdrawal

META:PHI
MENTORING, EDUCATION, AND CLINICAL TOOLS FOR ADDICTION
PARTNERS IN HEALTH INTEGRATION

Short Stay Units

- One day of observed withdrawal, monitoring & management
- Observed setting for ~6-8 hours
- Last drink the night before they arrive
- Arrive in withdrawal
- Capacity varies
  - Nursing support?
  - In hospital or in the community?
  - Medications on site or brought in?
  - Equipment available?

Indications for Short Stay Units

1. Daily withdrawal symptoms that make it difficult for patients to maintain abstinence
2. Committed to a time of abstinence
3. Committed to a treatment plan involving medications, counselling and follow up
4. **Withdrawal symptoms unlikely to resolve without medical treatment**
5. **Home withdrawal management unlikely to be successful**
6. **Has been in ED or hospital before for medical treatment of withdrawal**

Case 2

You have a patient that feels he’s finally ready to stop drinking. He just have no idea how to go about it. He’s never stopped cold turkey before. He’s tapered their alcohol significantly, but can’t get down past 6-7 tall cans per day. You’ve known this patient for about a month now, and know he lives at home with his wife, who isn’t fully aware of his alcohol use.

What do you do?

Indications for Home Detox

1. Daily withdrawal symptoms that make it difficult for patients to maintain abstinence
2. Committed to abstinence (or markedly reduced drinking)
3. Committed to a treatment plan involving medications, counselling and follow up

Appropriate for Home Detox

- The patient is in mild to moderate withdrawal and is not expected to require high loading doses of benzodiazepines (or they have already received a loading dose and their symptoms are now mild to moderate).
- The patient does not have a recent history of severe or complicated withdrawal, e.g., withdrawal seizures.
- The patient is 65 years of age or younger.
- The patient lives with someone who is reliable and can monitor their benzodiazepine and alcohol use.
- The patient is not on methadone or high opioid doses.
- The patient does not have cirrhosis with liver dysfunction.
- The patient does not have severe respiratory impairment, e.g., severe COPD.
- The patient does not have cognitive impairment or an active, severe psychiatric illness.

Tips

- Have the patient "prepare" to assess readiness
  - Can they throw their alcohol away, or do they need to finish what they have
  - Do they have a support person
  - Do they have time booked off work
  - Do they have foods/drinks they like e.g. Gatorade
  - Do they have supportive medications e.g. Tylenol, gravol, etc.

- Utilize Community Withdrawal Support Teams
  - Daily check-ins with the patient

- Consider daily pharmacy dispensing

Case 3

You have a patient that just can't stop using, alcohol and cocaine. They rent an apartment, but are at risk for losing it if they're don't get their life on track. Everyone they know uses, and everyone in their building is always using. They just need a break from using for a while. They say their withdrawal has been severe in the past, brought them to the ED, but they've never had a seizure.

What do you do?

Withdrawal Management Services

- Live-in setting for 3-10 days
- Arrive in any state e.g. intoxicated, withdrawal, DTs
- Capacity varies
  - Addiction workers? Nursing staff? Prescriber on site?
  - Access to medications?
  - Equipment?

Indications for Withdrawal Management Services

1. Daily withdrawal symptoms that make it difficult for patients to maintain abstinence
2. Committed to a time of abstinence
3. Committed to a treatment plan involving medications, counselling and follow up
4. Withdrawal symptoms unlikely to resolve without medical treatment
5. Home withdrawal management unlikely to be successful
6. Patient does not have a safe place to stay

Appropriate for Withdrawal Management Services

- The patient is in mild to moderate withdrawal and is not expected to require high loading doses of benzodiazepines (or they have already received a loading dose and their symptoms are now mild to moderate).
- The patient does not have a recent history of severe or complicated withdrawal, e.g., withdrawal seizures.
- The patient does not have cirrhosis with liver dysfunction.
- The patient does not have severe respiratory impairment, e.g., severe COPD.
- The patient does not have cognitive impairment or an active, severe psychiatric illness

How to communicate with the ED

How to communicate with the ED

Written letters

Give it the patient to take in & fax it to the ED

If you spoke with someone on the phone, put their name in the letter e.g. Attention Dr. James

Highlight

Will they be presenting in severe withdrawal? Will they need fast access to their first dose?

Have they required high dosing in the past? Did they receive any office treatment today?

Background

How did you assess the person, what time. e.g. phone assessment at 10am

Last drink

Significant medical history

Medications

When can the patient follow-up with you

e.g. Patient advised to come on DFD day after discharge to arrange ongoing care

Thank you

katie_dunham04@hotmail.com

Alcohol Use Disorder in ED:

Talking to patients about alcohol use and prescribing anti-craving medications

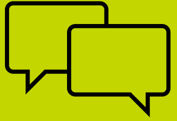
Hasan Sheikh

Sept 22, 2023

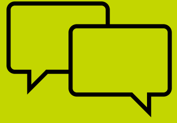
META:PHI Conference 2023

Case

- 42M brought by EMS with decreased level of consciousness (LOC), found with empty bottle of hard liquor
- 5 visits to the ED in the last 2 weeks for EtOH intoxication
- Observed overnight, LOC improving
- Re-assessed in the morning and while he still has slurred speech, he can carry on a conversation

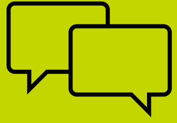


How do I start a conversation about drinking with my patient?



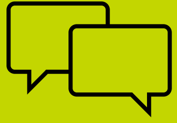
Talking about AUD with Patients

- Brief Negotiated Interview (BNI): ↓ alcohol consumption, ↓ alcohol-related consequences
  1. Establish rapport, ask permission to discuss alcohol use and its consequences
  2. Provide feedback on the patient's drinking levels and make a connection to the ED visit
  3. Enhance motivation, ask on a scale of 1-10 how ready to change drinking habits
  4. Negotiate goals, advise a plan of action



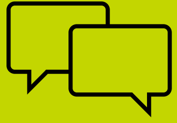
Talking about AUD with Patients

- Start with a non-confrontational question:
  - *What kind of alcohol do you like to drink?*
- Characterize the nature of the patient's AUD:
  - *Do you drink everyday? How many days in the week do you drink?*
  - *Do you get withdrawal symptoms if you stop drinking? How long does it take for you to get shaky? Do you need to have a drink first thing in the morning because of withdrawal?*
  - *Have you ever had a seizure when you've stopped drinking?*



Brief Motivational Interviewing

- **Triggers**: *What do you get out of drinking? In what ways does drinking help, even if it's short-term?*
- **Consequences**: *What are some of downsides / consequences of your drinking?*
  - Make connection between alcohol use and the ED visit itself
  - Can prompt other consequences: health/withdrawal, financial, strained relationships
- **Goals**: *What would an ideal relationship with alcohol be for you?*
  - No change → harm reduction → alcohol cessation
- **Readiness:** *How ready are you on a scale of 1-10 to make changes?*



Talking about AUD with Patients

- Highlight the distinction between the short-term effects of alcohol (ex. brief relief of anxiety) and the long-term effects of alcohol (ex. increased anxiety long-term)
- Introduce alcohol use disorder as a chronic and **treatable** medical condition
- Highlight that evidence-based treatments exist to support a variety of goals (from reduction to abstinence)
- Avoid language that guilts/shames/stigmatizes the patient

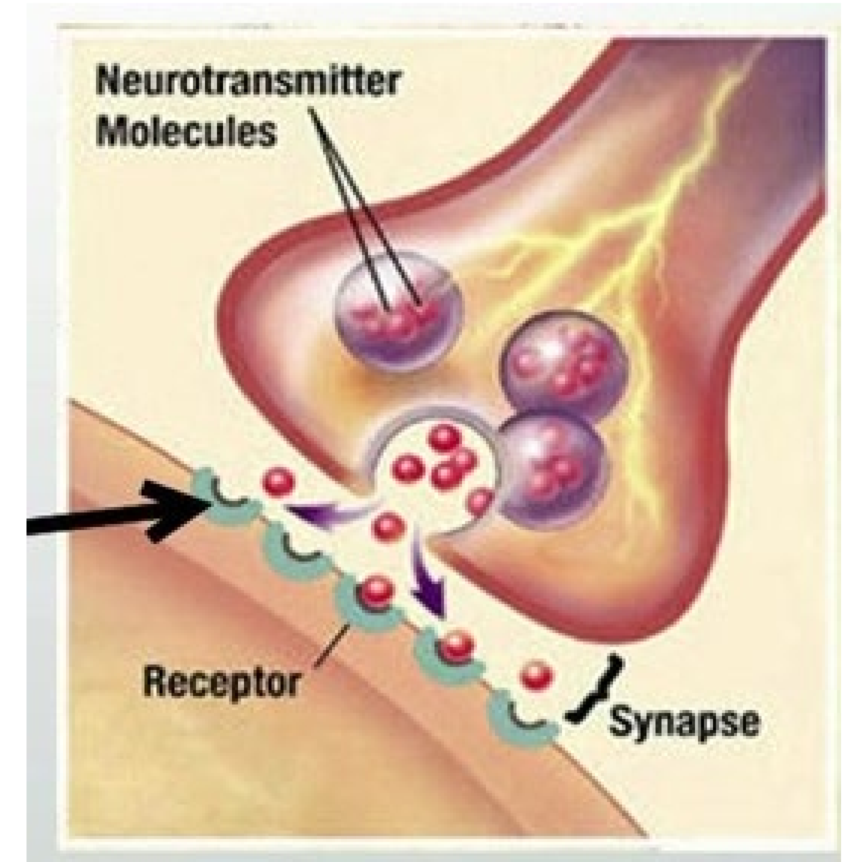
Anti-Craving Medications

Anti-Craving Medications

- Evidence-based pharmacotherapy for alcohol use disorder
- Effective even without behavioural interventions
- **<u>NNT 3-20</u>** for various outcomes, including:
  - Reducing heavy drinking days
  - Increasing days abstinent
- Despite efficacy, anti-craving medications are under-prescribed
  - **<u>< 10 % of people</u>** with AUD are prescribed anti-craving medications

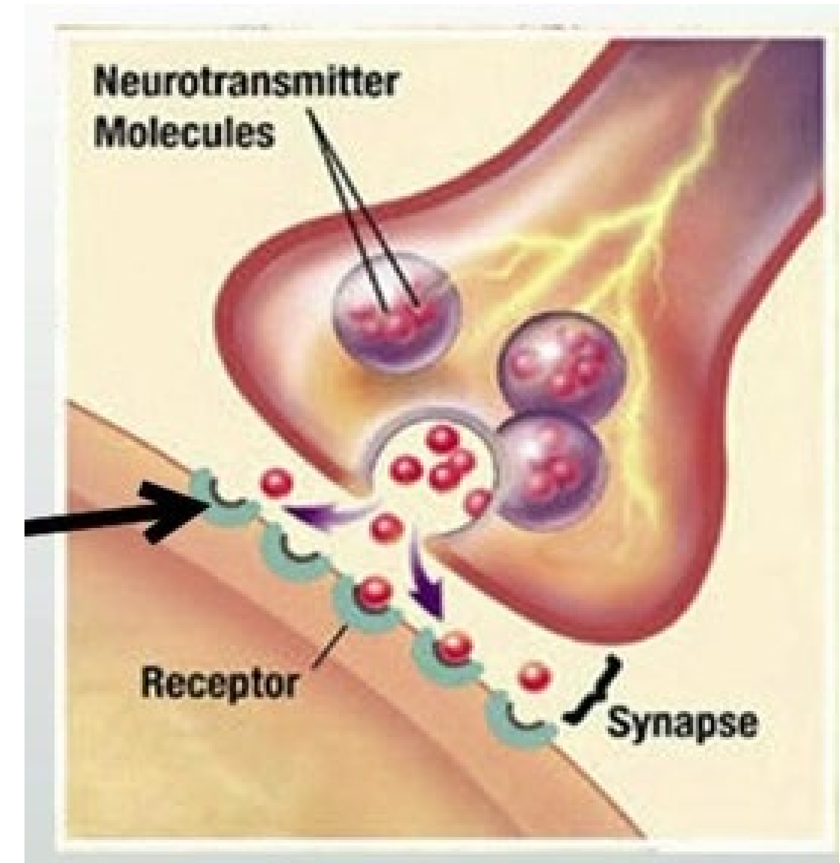
Naltrexone

- Opioid antagonist
- Reduces the euphoric from alcohol consumption
- Meta-analyses have established good efficacy
    - NNT = 12 to prevent return to heavy drinking
    - NNT = 20 to prevent return to any drinking
- Rx: 50 mg po daily x 7 days
    - LU code 532
    - Out-of-pocket costs: ~ $150 / month



Naltrexone

- Contraindications:
  - **Active opioid use**
  - Obvious signs of liver failure (don't have to check LFTs before initiating)
  - Allergy
  - Pregnancy risk category C
- Side effects: minor, GI upset



Acamprosate

- Also considered first-line treatment
- “Rebalances” GABA/glutamate receptors
- Believed to be effective by relieving subacute withdrawal symptoms
- Meta-analyses have established good efficacy
  - NNT = 12 to prevent return to any drinking
- Typically used in patients whose goal is abstinence, but can still be used in patients who are actively drinking
- Rx: 333 mg po TID x 7 days
  - Typically titrated up to 666 mg po TID in clinic if no renal impairment
  - LU code 531
  - Out-of-pocket costs: ~ $150 / month

Acamprosate

- Contraindications:
  - Severe renal impairment CrCl < 30 (but don't need to check renal function before initiating)
  - Allergy
  - Pregnancy risk category C
- Side effects: mild, diarrhea

Gabapentin

- Secondary effects on GABA and glutamate
- Used off-label for alcohol withdrawal syndrome and for AUD
- Less effective than BZD for preventing withdrawal seizures
- Small studies showing efficacy
  - NNT = 5 for reducing heavy drinking
  - NNT = 6 for increased abstinence
- May be most efficacious in those with high self-reported alcohol withdrawal symptoms when they stop drinking
  - NNT = 3 for reducing heavy drinking and increased abstinence

Gabapentin

- Dose dependent effect: up to 1800 mg / day used in studies
- Rx: 300 mg po TID x 7 days
  - No LU code
  - Out-of-pocket costs: ~ $30 / month
- Side effects: sedation, dizziness
- Some (but limited) abuse potential

Which medication(s) to offer?

- **<u>Naltrexone</u>**
  - Patients who have drug coverage (ODSP/OW/work insurance)
  - Not on opioids, no obvious signs of liver cirrhosis
  - Goal can be abstinence or reduction
  - *"If I have one drink, I have 9 or 10…"*
- **<u>Acamprosate</u>**
  - Patients who have drug coverage (ODSP/OW/work insurance)
  - Recent abstinence or interested in abstinence
  - Contraindications to naltrexone (ex. liver cirrhosis)
  - *"Once I think of alcohol, I can't let go of that image until I have a drink…"*
- **<u>Gabapentin</u>**
  - Patients whose ongoing drinking is triggered by withdrawal symptoms
  - Patients who ongoing drinking is triggered by anxiety
  - Patients with no medication coverage

Which medication(s) to offer?

- My most common Rx: **<u>both</u>** naltrexone and gabapentin
  - Naltrexone 50 mg po daily x 7 days
  - Gabapentin 300 mg po TID x 7 days
- Emphasize that these medications **<u>will not</u>** make them sick if they do drink
- Emphasize that medications can be titrated in the RAAM clinic to better control cravings / withdrawal symptoms
- Side effects:
  - Naltrexone: mild GI side effects
  - Acamprosate: diarrhea
  - Gabapentin: drowsiness, dizziness

Thiamine

- Alcohol and malnutrition associated with AUD reduce gastric/intestinal absorption of thiamine by 50-70%
- Thiamine supplementation is important to avoid Wernicke's encephalopathy
- Because of decreased absorption, ED provides an opportunity to administer non-oral routes
  - 250-500 mg IM/IV
  - IV route preferred to avoid multiple injections
- Recommend that patients continue to take oral thiamine:
  - 100 mg once daily for 2-4 weeks after discharge
  - 100 mg three times daily if higher risk for nutritional concerns (e.g., poor dietary intake, gastric bypass)

Harm Reduction / Compassionate Care

- Destigmatizing, non-judgmental language: avoid re-traumatizing, shaming patients
- Be explicit that abstinence isn't everyone's goal
  - *Putting the patient back in the driver's seat, in control of their alcohol use*
- Recognize when patients are at risk of self-initiated discharge
  - High risk time
  - Often a sign of untreated withdrawal, or severe AUD
  - Patients should never have to choose between acute medical care and self-treating withdrawal
- Peer support workers are invaluable team members

Managed Alcohol Programs

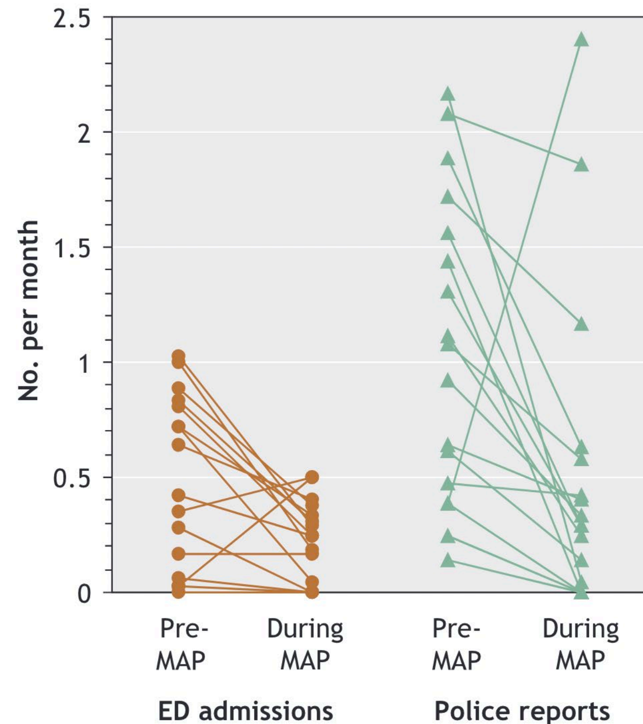


Fig. 1: Monthly numbers among study participants (n = 17) of visits to the emergency department (ED) and police encounters before and during the program. One subject's ED visits (not shown) decreased from 5.1 to 4.8 per month. MAP = Managed Alcohol Program.

Table 3: Mean daily consumption of alcohol before and during the Managed Alcohol Program (MAP) by each study participant

Pt no.	Reported average daily alcohol consumption (range), pre-MAP	Mean daily no. of std. drinks*		
		Pre-MAP	During MAP†	Δ
1	26 oz rum + 750 mL Listerine	31.9	7.5	-24.4
2	26 oz rum	18	13.5	-4.5
3	4 L Listerine	74	4.9	-69.1
4	5 (4-6) L sherry	64.9	7.3	-57.6
5	16 pints beer	21.3	9.5	-11.8
6	7 (6-8) bottles sherry	68	10.3	-57.7
7	8 (8-9) bottles wine	45	8.4	-36.6
8	10 (10-12) bottles sherry	97.4	13.2	-84.2
9	6 beers + 26 oz whisky	23.3	5.7	-17.6
10	26 oz rye whisky	17.3	9.8	-7.5
Total mean daily consumption ± standard deviation		45.6 ± 28.8	8.3 ± 3.5	-37.1‡ ± 28.3

METAPHI
MENTORING, EDUCATION, AND CLINICAL TOOLS FOR ADDICTION
PARTNERS IN HEALTH INTEGRATION

Summary

- Alcohol Use Disorder is a chronic, treatable medical condition
- Opportunity in the ED to offer hope to patients and initiate evidence-based treatment
- Brief motivational interviewing in the ED to support change talk
- Anti-craving medications:
  - Naltrexone
  - Acamprosate
  - Gabapentin
- Our care in the ED makes a difference in the lives of people with alcohol use disorder

Questions?

Cases

Case 1

- 35-year-old male presenting to the ED with head injury sustained while intoxicated
- Concussion symptoms: headache, fogginess, unsteady, photophobia
- Acute intoxication
- Admits to drinking 15-30 standard drinks per day x 20 years
- Triggers: numbing self, anxiety, withdrawal symptoms if he stops drinking
- Consequences: concussion, with prompting he recognizes that over time he is more anxious
- Goal: reduce drinking, more control over drinking
- No medication coverage

What medication would you prescribe?

Case 1

- Discharged from the ED on gabapentin 300 mg po TID
- Seen 1 week after initial ED visit at the RAAM clinic in follow-up:
  - Abstinent 6 out of 7 days, significantly reduced EtOH intake on drinking day (6 SD)
  - Ongoing anxiety, subacute withdrawal symptoms
  - No drowsiness from gabapentin
  - Gabapentin increased to 600 mg po TID
- Seen 2 weeks after initial ED visit:
  - Abstinent 7/7
  - 140 SD/week to 0 SD/week

Case 2

- 30-year-old female presenting to the ED with alcohol intoxication, abdominal pain
- Binge-pattern drinking: 3-4 days of 15-20 SD per day
- Mildly elevated liver enzymes: AST 170, ALT 90
- Triggers: psychosocial stressors, social/environmental, *“if I have one drink, I have 10…”*
- Consequences: strained relationships, blackouts
  - Able to connect ED visit for abdominal pain/alcohol hepatitis and EtOH use
- Goal: *“I’m probably one of those people that just can’t drink, but I don’t think it’s realistic that I’ll never drink again…”*
- Has medication coverage through work

What medication would you prescribe?

Case 2

- Discharged from the ED on naltrexone 25 mg po daily x 4 days to reduce GI side effects, then increased to 50 mg po daily
- Seen 2 weeks after initial ED visit at the RAAM clinic in follow-up:
  - Noticed improved control over drinking with naltrexone
  - Continued binge-pattern 2-3 times per week, reduced from 15-20 SD per day to 5-10 SD per day
  - No side effects from naltrexone, LFTs trending down
  - Naltrexone increased to 100 mg po daily
- 6 weeks after initial ED visit:
  - Reduced severity of binges
  - Reduced frequency of binges

Case 3

- 68-year-old female presenting to the ED after a fall
- Drinks 6 SD per night to help with sleep x 30 years
- No history of withdrawal symptoms
- Triggers: insomnia, helps her fall asleep
- Consequences: can’t identify consequences of drinking initially
  - With prompting, can draw the link between her alcohol use and her fall
  - Recognizes poor quality of sleep with alcohol use
- Goal: not be dependent on alcohol for sleep
- Has medication coverage through ODB

What medication would you prescribe?

Case 3

- Discharged from the ED on naltrexone 50 mg po daily
- Initial RAAM clinic follow-up:
  - No change in EtOH use
  - Naltrexone timing changed to 1 hour prior to first drink
  - Cognitive-behavioural interventions
- In the following 12 months:
  - Little change in EtOH use
  - Naltrexone dose increased
  - Change to gabapentin, titration over months
  - Ongoing counseling

Case 3 continued

- RAAM clinic follow-up:
  - Ongoing concerns from patient regarding insomnia if she did not drink
  - *“What would happen if you didn’t sleep one night?”*
  - Set a goal of one day a week where she didn’t drink, planned for a poor night’s sleep and little to do the next day
  - After two weeks where she didn’t drink one night per week – stopped EtOH all together
  - Gabapentin slowly weaned
  - Quality of sleep improved
- All possible because of an intervention in the ED that helped motivate the patient to make changes to her EtOH use

Wrap-up

AUD ED Toolkit – Materials

- Recommendations
- Summary
- Order set
- Approach pathway
- Withdrawal flowchart
- Special considerations
- CIWA-Ar
- CIWA-Ar training tool
- Anti-craving prescription template
- Withdrawal prescription template
- Discharge notes for primary care
- Patient handout
- Poster
- Training videos
- Brief negotiated interview, overview

People who use drugs and alcohol deserve care.

You're not alone.
Talk to us about substance use.
We're here to help.

There are **options** for care. Ask to talk to a health care provider about your substance use. Change can start **now**.
There's always hope.

Find a rapid access addiction medicine clinic near you.
https://www.metaphi.ca/raam-clinics

Watch a story of recovery.
https://www.youtube.com/watch?v=nCC44vcBMA8

METAPHI
MENTORING, EDUCATION, AND CLINICAL TOOLS FOR ADDICTION
PARTNERS IN HEALTH INTEGRATION

AUD ED Toolkit – Key Messaging (1)

The most common alcohol-related ED presentations include:

- Alcohol intoxication
- Alcohol withdrawal
- Falls
- Collapse (including seizures)
- Head injury, assault
- Accidents
- Feeling “unwell”
- Non-specific gastro-intestinal issues
- Cardiac issues (including chest pain)
- Psychiatric conditions (including deliberate self-harm and overdose).

AUD ED Toolkit – Key Messaging (2)

Monitor with CIWA-Ar

- q60-120 min for CIWA-Ar < 10: Mild withdrawal
- q60 min for CIWA-Ar 10–19: Moderate withdrawal
- q30-60 min for CIWA-Ar ≥ 20: Severe withdrawal

Definitive signs of severe withdrawal:

- Signs of autonomic hyperactivity: Profuse sweating, severe tremor, repeat vomiting, SBP > 180 DBP >110, HR > 120 bpm, arrhythmia, T > 37.5 C
- Hallucinations, psychomotor agitation, confusion, disorientation, delusions, withdrawal seizures, DTs

AUD ED Toolkit – Key Messaging (3)

Loading doses

- For all patients with a history of withdrawal seizure or Delirium Tremens (DTs)
  - Diazepam 20 mg every 1 hour x3
  - Lorazepam 4 mg every 1 hour x3

  *or until lightly sedated with minimal/no tremor

- Hold intoxicated patients in the ED if they are seeking alcohol cessation
  - Patients with a history of withdrawal seizures or DTs require loading doses before transfer or discharge
  - Patients without this history can be transferred to a WMS if there are no complicating co-morbidities

AUD ED Toolkit – Key Messaging (4)

Symptom-triggered treatment

• For CIWA > 10 give diazepam 20 mg

Lower doses can be used with clinical judgment (e.g., no definitive physical signs of alcohol withdrawalare yet present)

• Lorazepam 2–4 mg should be used in those with cirrhosis and when there is a higher risk for benzodiazepine toxicity, including the elderly, those on high doses of opioids, and those with liver or respiratory impairment

• Lorazepam 0.5-1mg should be used in those with decompensated cirrhosis or severe respiratory impairment

AUD ED Toolkit – Key Messaging (4)

Symptom-triggered treatment

- For CIWA > 10 give diazepam 20 mg

Lower doses can be used with clinical judgment (e.g., no definitive physical signs of alcohol withdrawalare yet present)

- Lorazepam 2–4 mg should be used in those with cirrhosis and when there is a higher risk for benzodiazepine toxicity, including the elderly, those on high doses of opioids, and those with liver or respiratory impairment

- Lorazepam 0.5-1mg should be used in those with decompensated cirrhosis or severe respiratory impairment

If not responding, double the oral dose

If not responding (or presenting already in severe withdrawal), use IV doses

If not responding, consider phenobarbital

AUD ED Toolkit – Key Messaging (5)

Brief Negotiated Interviews

1. Establish rapport and ask permission to discuss alcohol consumption and its possible consequences.

2. Provide feedback on the patient's drinking levels and make a connection to the ED visit.

3. Enhance motivation to reduce drinking by asking how ready on a scale of 1–10 the patient is to change any aspect of their drinking.

4. Negotiate goals and advise a plan of action.

Provide & prescribe thiamine

Prescribe anti-craving medications

Connect to peers, system navigators, social workers, counsellors

Refer to community treatment services

Thank you!

Katie Dunham

katie_dunham04@hotmail.com

Kelly Shillington

Kelly.Shillington@sinaihealth.ca

Bjug Borgundvaag

bjug.borgundvaag@sinaihealth.ca

Hasan Sheikh

Hasan.Sheikh@uhn.ca

META:PHI

MENTORING, EDUCATION, AND CLINICAL TOOLS FOR ADDICTION

PARTNERS IN HEALTH INTEGRATION