A win for them & a win for you: how hospitalists can reduce harms from alcohol use disorders

Eileen Barrett, MD, MACP, SFHM
Krystle D. Apodaca, DNP, FHM
University of New Mexico Health Sciences Center

Disclosures

- No relevant commercial relationships to disclose.

Objectives

At the conclusion of this session, participants should be able to:

- Use case-based learning to adopt tools for reducing harms to patients with alcohol withdrawal
- Describe how to overcome barriers to clinicians prescribing medications for alcohol use disorders
- Explain pros and cons of prescribing medications for alcohol use disorders


Q
U
i
Z

Jason W is a 34 yo with hypertension and depression who drinks a 12 pack of beer a day admitted with severe alcohol withdrawal. He’s receives benzodiazepines, thiamine, folate, and a multivitamin. When his mentation is clear, he states he would like to cut back but AA didn’t work for him. He asks what you think he should do.

What diagnosis would you give Jason regarding his alcohol use?

Alcoholic

Alcohol abuser

Addict

Alcohol use disorder

I am not sure

How do you decide what and how much benzodiazepines to give?

Fixed dosing of Librium 10mg q6 with PRN lorazepam 2mg IV q 2 hours

None, I would give him gabapentin monotherapy

Midazolam drip titrated by the bedside nurse PRN sedation

Symptom-triggered dosing through a protocol such as CIWA

I am not sure

What dose and what route do you prescribe of thiamine?

None since he is able to eat

Thiamine 100mg PO daily

Thiamine 500mg IV q 8 hours for 5 days

Thiamine 200mg IV q24 hours for 3 doses

I am not sure

What do you recommend to Jason to help him cut back on his drinking?

Provide a pamphlet on the harms of alcohol abuse

Try another AA group, and consider going several times a week

Antabuse/disulfiram

Naltrexone or acamprosate

I am unsure

Foundations of treating patients with alcohol use disorder

REVIEW ARTICLE

Dan L. Longo, M.D., *Editor*

Brain Change in Addiction as Learning, Not Disease

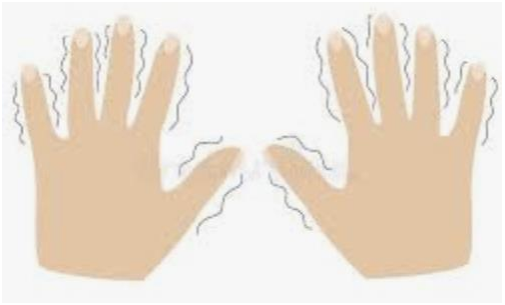
VIEWPOINT

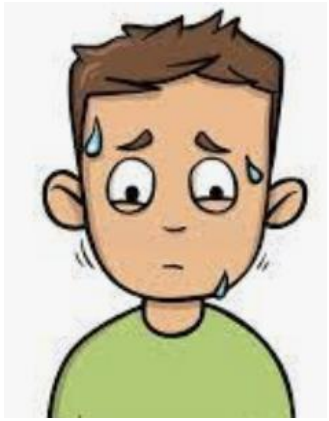
Changing the Language of Addiction

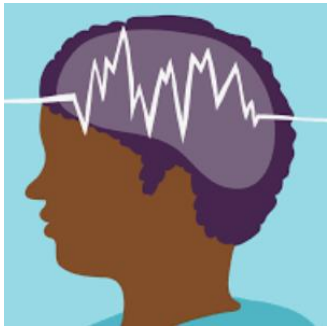
Prediction of Alcohol Withdrawal Severity Scale ☆

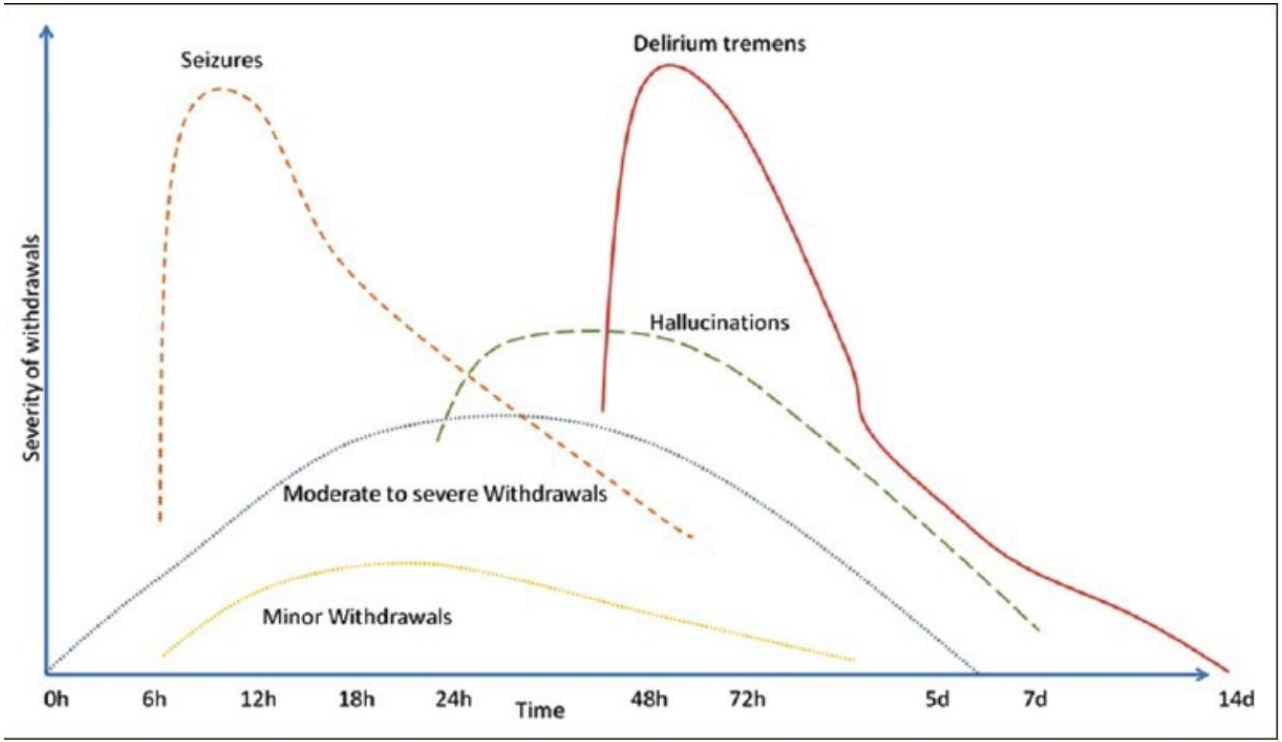
Screens hospitalized patients for complicated alcohol withdrawal (seizures, delirium tremens).

Alcohol withdrawal has many symptoms









Kattimani S, Bharadwaj B. Clinical management of alcohol withdrawal: A systematic review. Ind Psychiatry J. 2013 Jul;22(2):100-8. doi: 10.4103/0972-6748.132914. PMID: 25013309; PMCID: PMC4085800.

A symptom triggered scale for treatment is preferred

Table 1. Clinical Institute Withdrawal Assessment of Alcohol Scale, Revised.*

Components of Scale	Most Severe Manifestations
Nine items scored on a scale ranging from 0 (no symptoms) to 7 (most severe symptoms)	
Nausea or vomiting	Constant nausea with vomiting
Tremor	Severe tremor, even with arms extended
Paroxysmal sweats	Drenching sweats
Anxiety	Acute panic
Tactile disturbances (itching, numbness, sensation of bugs crawling on or under the skin)	Continuous hallucinations
Auditory disturbances (sensitivity to sound, hearing things that are not there)	Continuous hallucinations
Visual disturbances (sensitivity to brightness and color, seeing things that are not there)	Continuous hallucinations
Headache, sensation of a band around the head	Extremely severe headache
Agitation	Pacing during most of interview with clinician or thrashing about
One item scored on a scale ranging from 0 (no symptoms) to 4 (disoriented with respect to place or person)	
Orientation and clouding of sensorium	

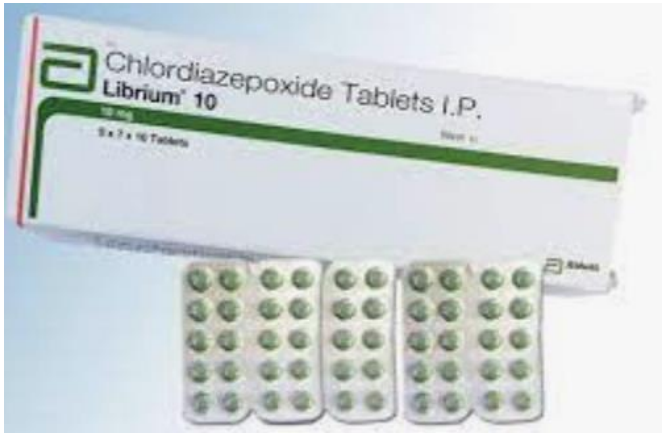
Schutick, MA. Recognition and Management of Withdrawal Delirium (Delirium Tremens). N Engl J Med 2014; 371:2109-2113.
doi: 10.1056/NEJMra1407298

TABLE 1. Alcohol Withdrawal Severity.

Severity Category	Associated CIWA-Ar Range*	Symptom Description
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	Seizure or signs and symptoms indicative of delirium – such as an inability to fully comprehend instructions, clouding of the sensorium or confusion – or new onset of hallucinations

American Society of Addiction Medicine. (2021). Clinical practice guideline on alcohol withdrawal management. https://www.asam.org/Quality-Science/quality/guideline-on-alcohol-withdrawal-management

Benzodiazepines are the mainstay of treatment



IV thiamine is best

SUPPORTIVE: NON-PHARMACOLOGIC OPTIONS AND SBIRT

OFFER TO: everyone with UAU/AUD

WHAT: a comprehensive menu of supportive care including:

- SBIRT/brief intervention
- 12-step groups
- peer support groups
- psychiatric support and counselling


SCREENING
BRIEF INTERVENTION
REFERRAL TO TREATMENT

https://youtu.be/uL8QyJF2wVw

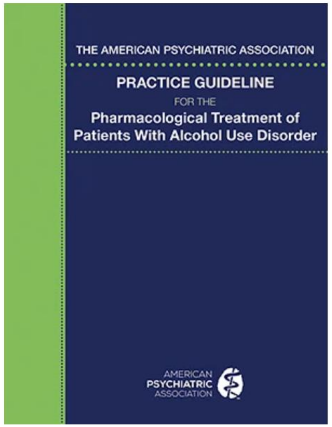
There are 4 medications supported by literature for the treatment of AUD

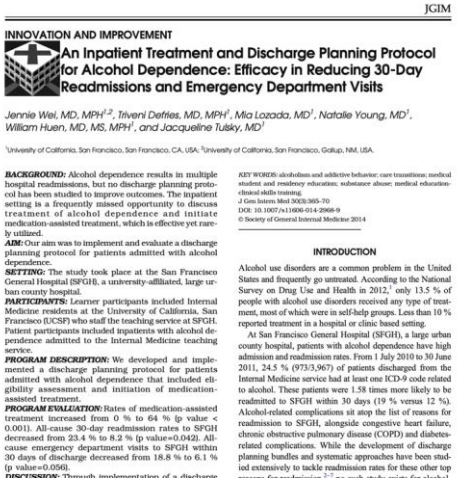
1st line: Naltrexone

2nd line: Acamprosate

3rd line: Topiramate

4th line: Gabapentin





JGIM

INNOVATION AND IMPROVEMENT

An Inpatient Treatment and Discharge Planning Protocol for Alcohol Dependence: Efficacy in Reducing 30-Day Readmissions and Emergency Department Visits

Jennie Wei, MD, MPH[1,2], Triveni Defries, MD, MPH[1], Mia Lozada, MD[1], Natalie Young, MD[1], William Huen, MD, MS, MPH[1], and Jacqueline Tulsky, MD[1]

[1]University of California, San Francisco, San Francisco, CA, USA; [2]University of California, San Francisco, Gallup, NM, USA.

BACKGROUND: Alcohol dependence results in multiple hospital readmissions, but no discharge planning protocol has been studied to improve outcomes. The inpatient setting is a frequently missed opportunity to discuss treatment of alcohol dependence and initiate medication-assisted treatment, which is effective yet rarely utilized.

AIM: Our aim was to implement and evaluate a discharge planning protocol for patients admitted with alcohol dependence.

SETTING: The study took place at the San Francisco General Hospital (SFGH), a university-affiliated, large urban county hospital.

PARTICIPANTS: Learner participants included Internal Medicine residents at the University of California, San Francisco (UCSF) who staff the teaching service at SFGH. Patient participants included inpatients with alcohol dependence admitted to the Internal Medicine teaching service.

PROGRAM DESCRIPTION: We developed and implemented a discharge planning protocol for patients admitted with alcohol dependence that included eligibility assessment and initiation of medication-assisted treatment.

PROGRAM EVALUATION: Rates of medication-assisted treatment increased from 0 % to 64 % (p value < 0.001). All-cause 30-day readmission rates to SFGH decreased from 23.4 % to 8.2 % (p value=0.042). All-cause emergency department visits to SFGH within 30 days of discharge decreased from 18.8 % to 6.1 % (p value=0.056).

KEY WORDS: alcoholism and addictive behavior; care transitions; medical student and residency education; substance abuse; medical education-clinical skills training.

J Gen Intern Med 30(3):365-70

DOI: 10.1007/s11606-014-2968-9

INTRODUCTION

Alcohol use disorders are a common problem in the United States and frequently go untreated. According to the National Survey on Drug Use and Health in 2012,[1] only 13.5 % of people with alcohol use disorders received any type of treatment, most of which were in self-help groups. Less than 10 % reported treatment in a hospital or clinic based setting.

At San Francisco General Hospital (SFGH), a large urban county hospital, patients with alcohol dependence have high admission and readmission rates. From 1 July 2010 to 30 June 2011, 24.5 % (973/3,967) of patients discharged from the Internal Medicine service had at least one ICD-9 code related to alcohol. These patients were 1.58 times more likely to be readmitted to SFGH within 30 days (19 % versus 12 %). Alcohol-related complications sit atop the list of reasons for readmission to SFGH, alongside congestive heart failure, chronic obstructive pulmonary disease (COPD) and diabetes-related complications. While the development of discharge planning bundles and systematic approaches have been studied extensively to tackle readmission rates for these other top

Choosing the appropriate medication

Naltrexone 50 mg tablet once a day

- LFTs should be <4-5 x upper limit of normal
- Be aware it will decrease effects of opioids

Acamprosate 333 mg tablet three times a day

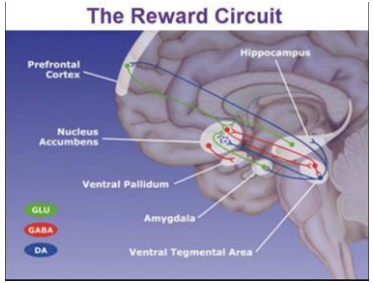
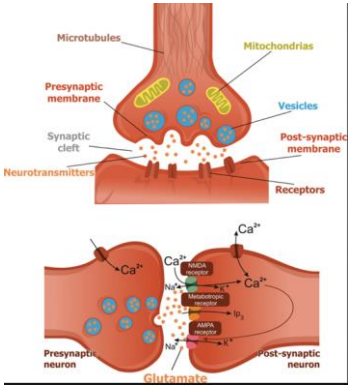
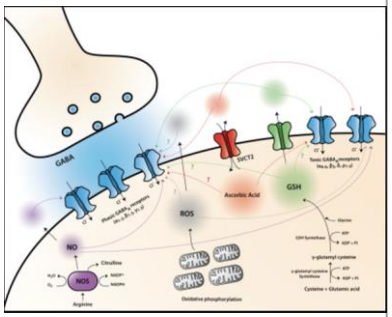
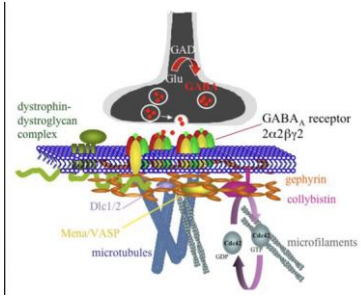
- Contraindicated if GFR<30
- Be aware of increase risk of suicidal thoughts

Topiramate 25 mg tablet once a day

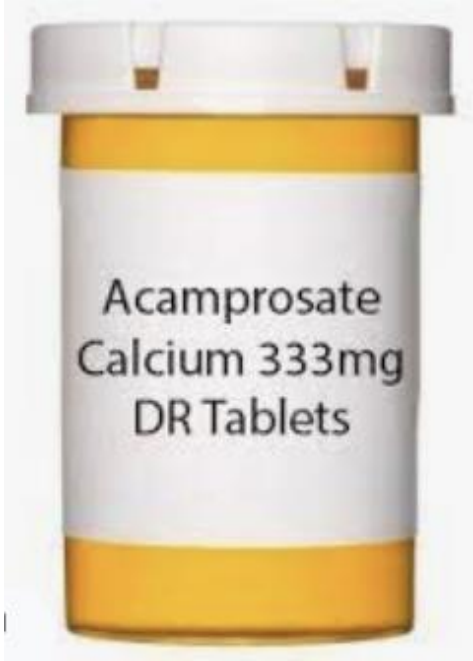
- adjust for renal impairment
- must be increased slowly to 300 mg

Gabapentin 300mg capsule at bedtime

- must be increased slowly to 1800 mg

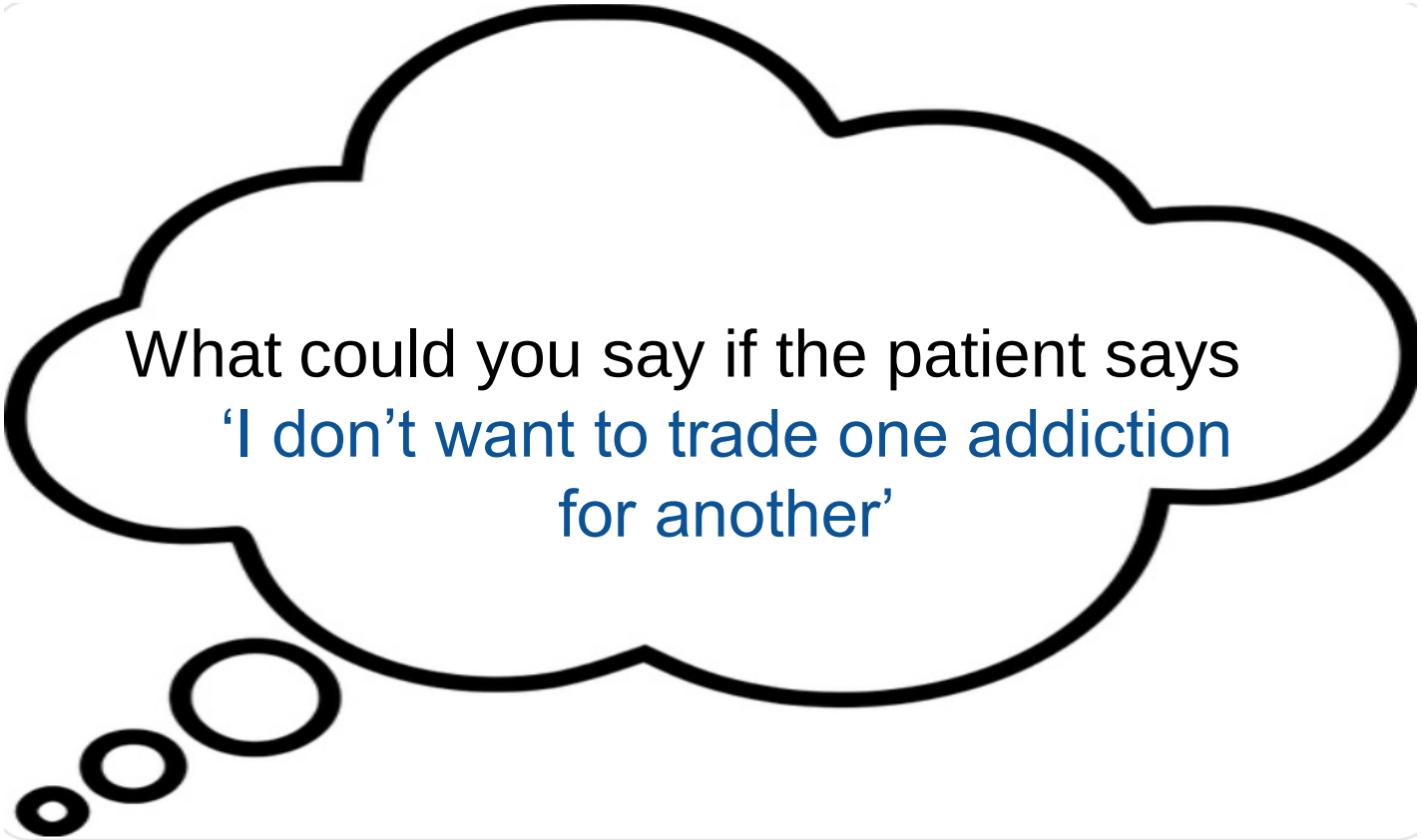
Naltrexone	Acamprosate	Topiramate	Gabapentin
			
Mapping Ignorance (2021).Differences in the reward pathway in autism. https://mappingignorance.org/2018/09/03/differences-in-the-reward-pathway	Sanesco Health (2021). Glutamate: The primary escitatiry neurotransmitter. https://sanescohealth.com/blog/glutamate-excitatory-neurotransmitter/	Calvo, D. J. (2021). Dynamic regulation of the GABAA receptor function by redox mechanisms. https://molpharm.aspetjournals.org/content/90/3/326	Pharmacological Addiction (2021). Pharmacological agent may treat cocaine addiction. https://www.science20.com/erin039s_spin/pharmacological_agent_may_treat_cocaine_addiction
NNT=12 to prevent heavy drinking, 20 to prevent return to any drinking	NNT=12	Moderate strength of evidence for efficacy on drinks per drinking days , %age of heavy drinking days, and	NNT= 8 for increased rate of abstinence at a dose of 1,800 mg daily

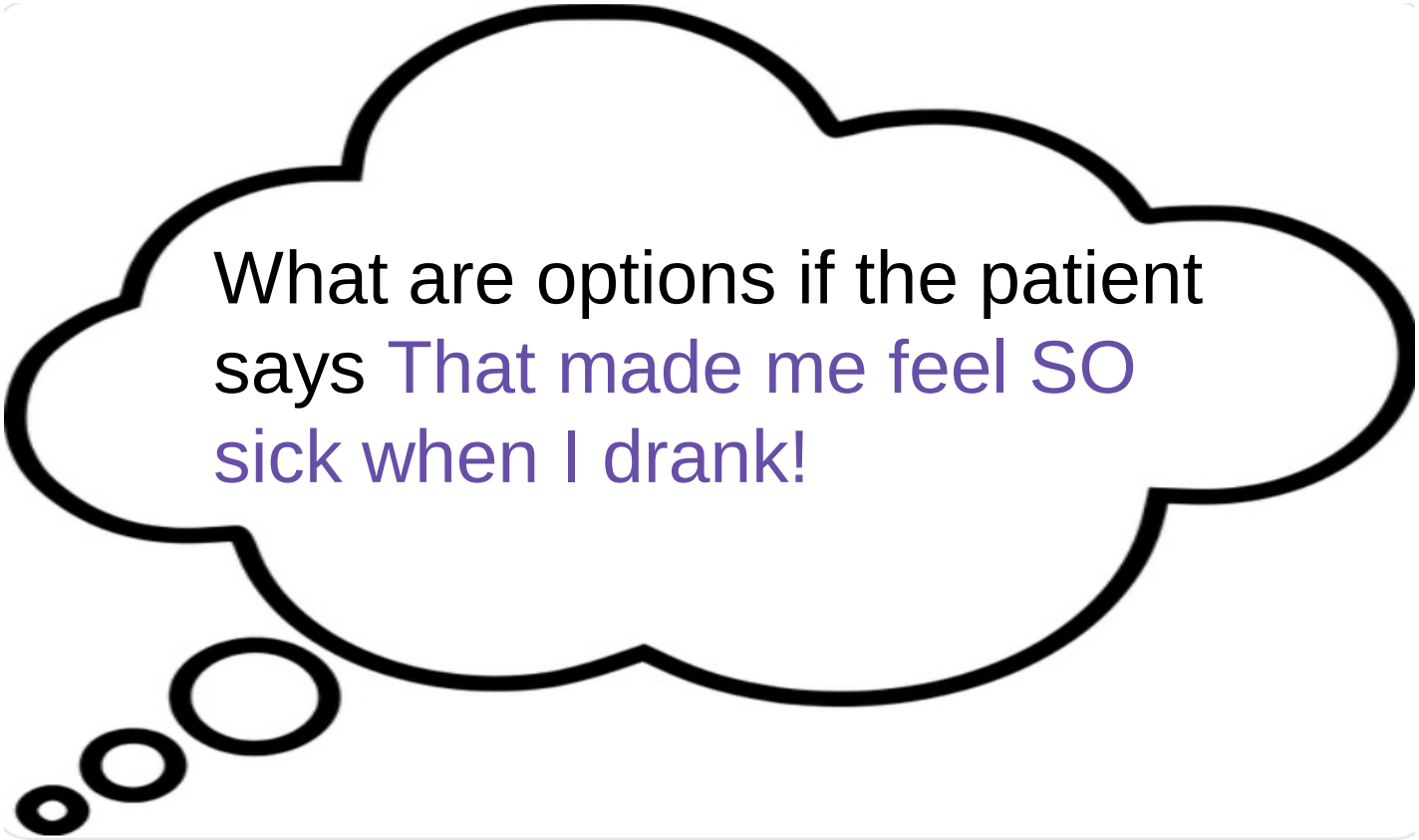
Talk about medications with every patient

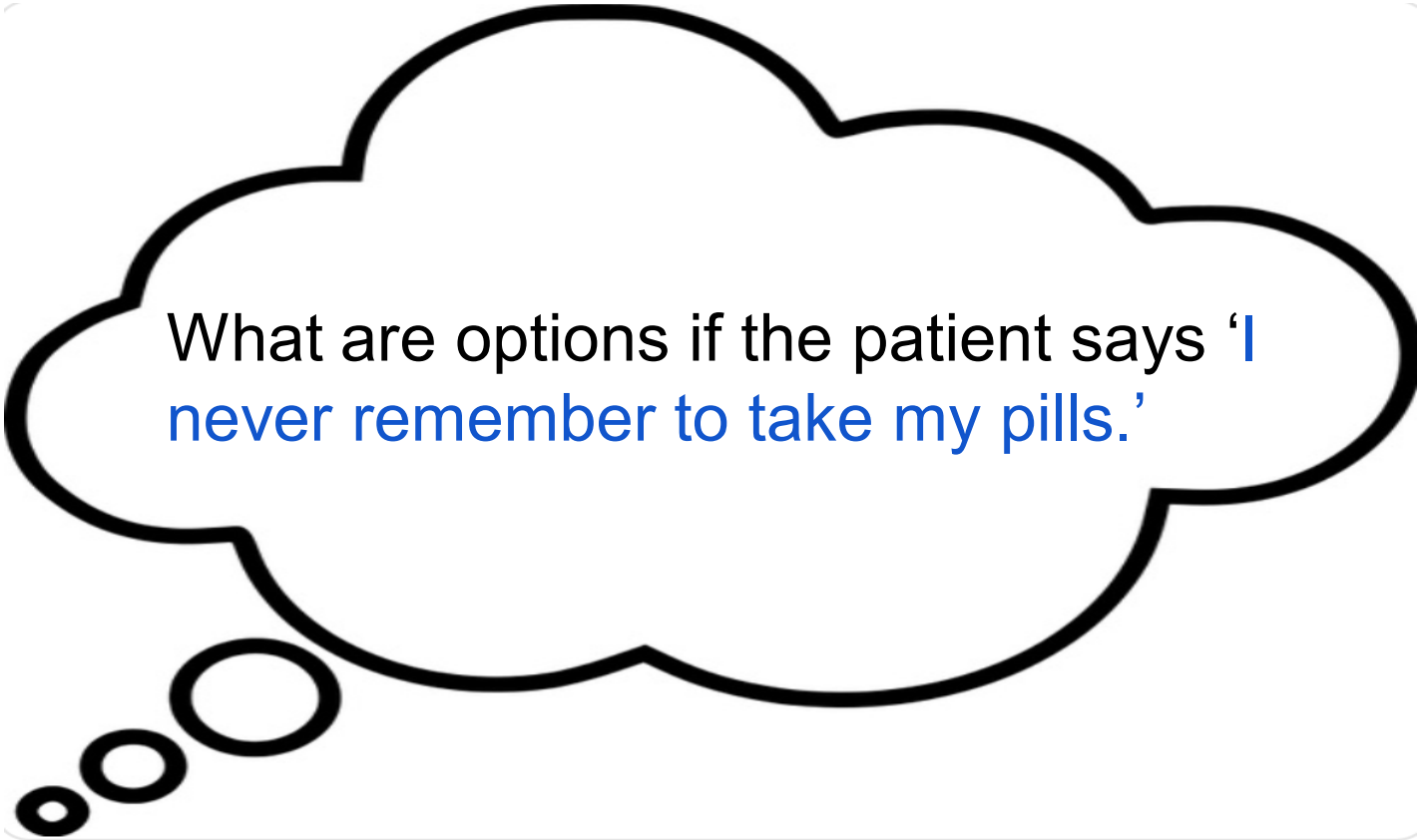


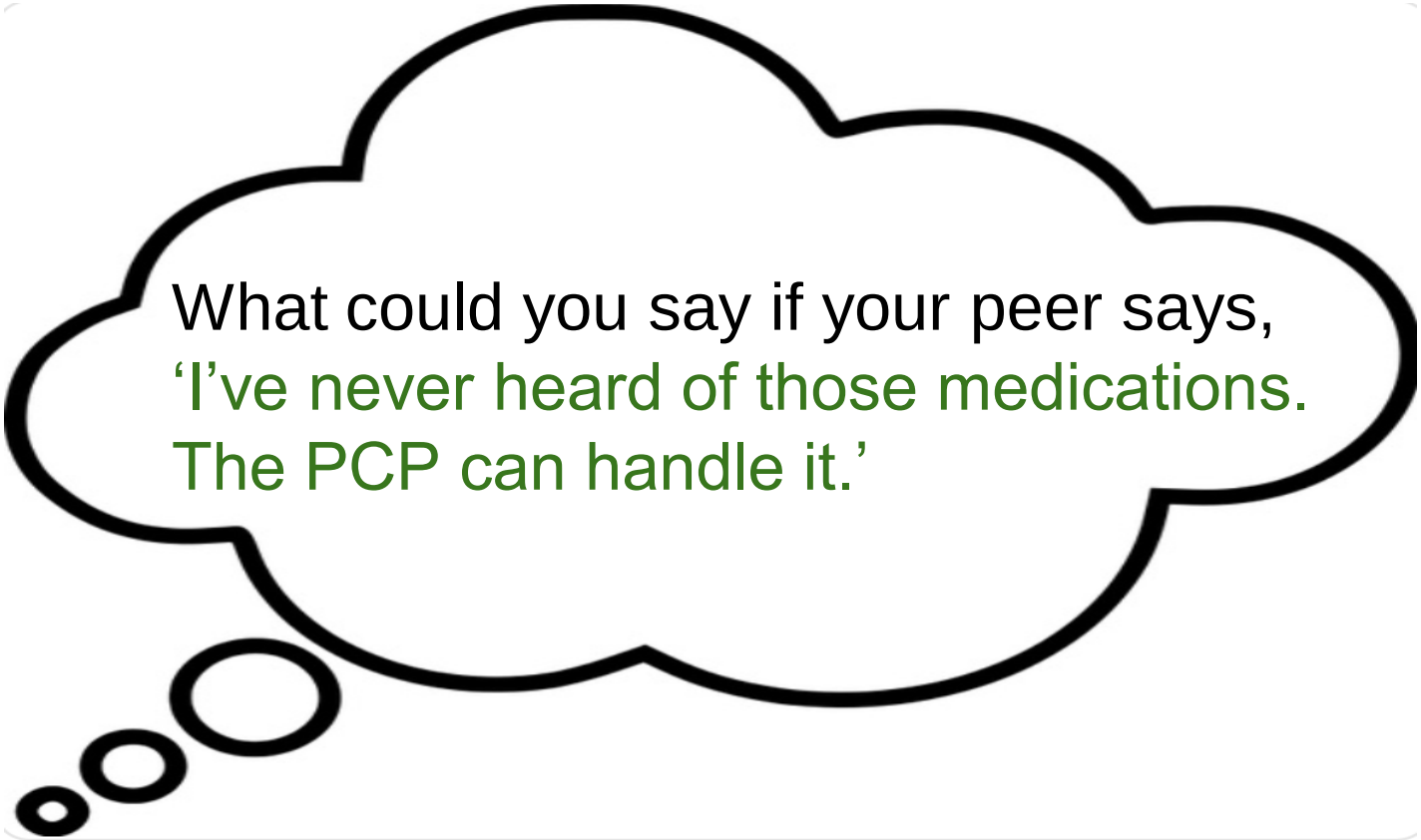
What are the harms of discussing these medications?

JUST DO IT.


What could you say if the patient says
‘I don’t want to trade one addiction for another’


What are options if the patient says That made me feel SO sick when I drank!


What are options if the patient says ‘I never remember to take my pills.’


What could you say if your peer says,
‘I’ve never heard of those medications.
The PCP can handle it.’


Q
U
i
Z

Jason W is a 34 yo with hypertension and depression who drinks a 12 pack of beer a day admitted with severe alcohol withdrawal. He’s receives benzodiazepines, thiamine, folate, and a multivitamin. When his mentation is clear, he states he would like to cut back but AA didn’t work for him. He asks what you think he should do.

What diagnosis would you give Jason regarding his alcohol use?

Alcoholic

Alcohol abuser

Addict

Alcohol use disorder

I am not sure

How do you decide what and how much benzodiazepines to give?

Fixed dosing of Librium 10mg q6 with PRN lorazepam 2mg IV q 2 hours

None, I would give him gabapentin monotherapy

Midazolam drip titrated by the bedside nurse PRN sedation

Symptom-triggered dosing through a protocol such as CIWA-Ar

I am not sure

What dose and what route do you prescribe of thiamine?

None since he is able to eat

Thiamine 100mg PO daily

Thiamine 500mg IV q 8 hours for 5 days

Thiamine 200mg IV q24 hours for 3 doses

I am not sure

What do you recommend to Jason to help him cut back on his drinking?

Provide a pamphlet on the harms of alcohol abuse

Try another AA group, and consider going several times a week

Antabuse/disulfiram

Naltrexone or acamprosate

I am unsure

References

1. American Psychiatric Association. (2018). Practice guideline for the pharmacological treatment of patients with alcohol use disorder. https://doi.org/10.1176/appi.books.9781615371969
2. American Society of Addiction Medicine. (2021). Clinical practice guideline on alcohol withdrawal management. https://www.asam.org/Quality-Science/quality/guideline-on-alcohol-withdrawal-management
3. Botticelli MP, Koh HK. Changing the Language of Addiction. *JAMA.* 2016;316(13):1361–1362. doi:10.1001/jama.2016.11874
4. Calvo, D. J. (2021). Dynamic regulation of the GABAA receptor function by redox mechanisms. https://molpharm.aspetjournals.org/content/90/3/326
5. Kattimani S, Bharadwaj B. Clinical management of alcohol withdrawal: A systematic review. Ind Psychiatry J. 2013 Jul;22(2):100-8. doi: 10.4103/0972-6748.132914. PMID: 25013309; PMCID: PMC4085800.
5. Mapping Ignorance (2021).Differences in the reward pathway in autism. https://mappingignorance.org/2018/09/03/differences-in-the-reward-pathway
6. Pharmacological Addiction (2021). Pharmacological agent may treat cocaine addiction. https://www.science20.com/erin039s_spin/pharmacological_agent_may_treat_cocaine_addiction
7. Rastegar, D.A. Brain Change in Addiction as Learning, Not Disease. N Engl J Med. 2019 Jan 17;380(3):301. doi: 10.1056/NEJMc1815144. PMID: 30653283
8. Sanesco Health (2021). Glutamate: The primary escitatiry neurotransmitter. https://sanescohealth.com/blog/glutamate-excitatory-neurotransmitter/
9. Schutick, MA. Recognition and Management of Withdrawal Delirium (Delirium Tremens). N Engl J Med 2014; 371:2109-2113. doi:10.1056/NEJMra1407298
10. Wei J, Defries T, Lozada M, Young N, Huen W, Tulsky J. An Inpatient Treatment and Discharge Planning Protocol for Alcohol Dependence: Efficacy in Reducing 30-Day Readmissions and Emergency Department Visits. *Journal of General Internal Medicine*. 2015;30(3):365-370. doi:10.1007/s11606-014-2968-9

@EileenBarrettNM @KrystleApodaca