# Treatment of Alcohol Use Disorder

MAINTENANCE OF ABSTINENCE

Komaromy 2014

#### Summary

- ▶ Diagnosis of Alcohol Use Disorder
- ► Psychosocial treatments
- Medications to help achieve and maintain abstinence

Mr. G is a divorced 64 year old man who was intoxicated when he was hospitalized for aspiration pneumonia (commonly associated with being "passed out") last year. You have been gently encouraging him to address his drinking problem since then. He is finally ready to discuss it, because his friend just died of alcohol-related cirrhosis.

How can you help Mr. G after he withdraws from alcohol?

Diagnosis of Substance Use Disorders	DSM-IV Abuse <sup>a</sup>		DSM-IV Dependence <sup>b</sup>		Substance Use Disorders <sup>c</sup>	
Hazardous use	X	1	-		x	1
Social/interpersonal problems related to use	X	≥1 criterion	-		X	
Neglected major roles to use	X		=		X	
Legal problems	X		-		-	
Withdrawal <sup>d</sup>	-		X	1	X	
Tolerance	-		X	≥3 criteria	X	≥2 criteria
Used larger amounts/longer	-		X		X	
Repeated attempts to quit/control use	-		X		X	
Much time spent using	=		X		X	
Physical/psychological problems related to use	-		X		X	
Activities given up to use	-		X	J	X	
Craving	-		-		X	J

DSM-IV and DSM-5 Criteria for Substance Use Disorders

Hasan, D. Am J Psychiatry. 2013;170(8):834-851

DSM-5

<sup>&</sup>lt;sup>a</sup> One or more abuse criteria within a 12-month period and no dependence diagnosis; applicable to all substances except nicotine, for which DSM-IV abuse criteria were not given.

<sup>&</sup>lt;sup>b</sup> Three or more dependence criteria within a 12-month period.

<sup>&</sup>lt;sup>c</sup> Two or more substance use disorder criteria within a 12-month period.

d Withdrawal not included for cannabis, inhalant, and hallucinogen disorders in DSM-IV. Cannabis withdrawal added in DSM-5.

#### Next steps in diagnosis

- Does this patient need medical assistance with alcohol withdrawal?
- ▶ If this patient does not meet the diagnosis of AUD, does s/he meet criteria for "risky drinking"?
  - ► Men < age 65: more than 14 drinks per week OR more than 4 drinks in any one day
  - ► Women (and men >65): more than 7 drinks per week or more than 3 drinks in any one day
  - ▶ If yes: brief intervention

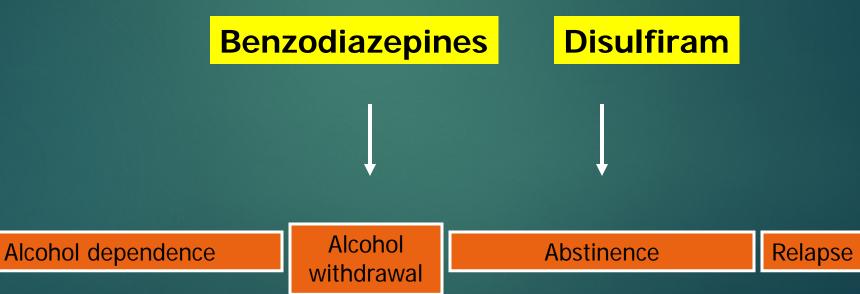
#### Psychosocial Interventions for AUD

- ▶ Effectiveness
- ▶ Modalities:
  - ▶ Peer support
  - Motivational Interviewing
  - ▶ Cognitive Behavioral Therapy
  - "Medication Management" visits

## Approved Medications for treatment of alcohol addiction

- Disulfiram (Antabuse)
- Acamprosate (Campral)
- ► Naltrexone, oral (Revia)
- ▶ Naltrexone, injectable (Vivitrol)

## Traditional medical interventions in alcoholism



#### Newer Medications

- Acamprosate
- Naltrexone (oral)
- Naltrexone (injectable)

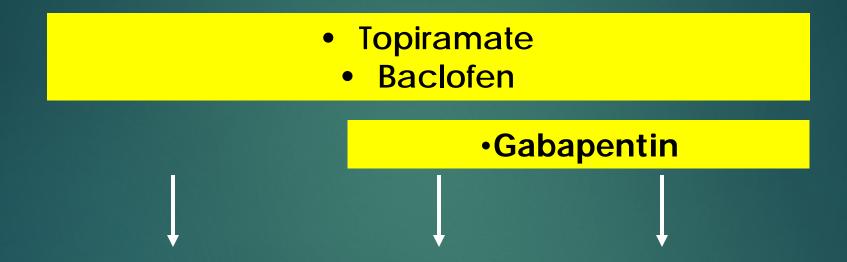
Alcohol dependence

Alcohol withdrawal

**Abstinence** 

Relapse

#### Off-label Medications



Alcohol dependence

Alcohol withdrawal

**Abstinence** 

Relapse

#### Why use Naltrexone?

- COMBINE study showed: Naltrexone plus PCP med management is most effective intervention for alcohol dep
- More effective than intensive counseling with or without meds
- Acamprosate ineffective in this trial
- ▶ 16 week intervention led to 74% good outcome; 48% sustained at 1 year
- Cochrane: risk of heavy drinking 83% on naltrexone compared w placebo 1

#### What is Naltrexone?

- Opiate blocker
- Decreases craving for ETOH
- Lowers risk of relapse, and makes relapse less severe
- Contraindicated with active liver disease (transaminases > 3x normal)
- Can't use if pt needs opiates; will cause opiate withdrawal
- May work better in pts with less severe alcoholism, later age of onset (Type A) <sup>1</sup>

### Prescribing Naltrexone

- Common side effects is nausea (rarely anxiety, muscle aches)
- Side effects decrease rapidly over 1<sup>st</sup> month
- ► Check LFTs at baseline and 1 month
- ► Start slow (25 mg/d) and increase to 50 mg/d when side effects decrease
- Consider 100 mg/d (COMBINE study)

### Improving Adherence

- Consider asking spouse/parent to administer naltrexone
- Med management visits are important
- Consider injectable form (Vivitrol)
- ▶ Recommend 12-step participation

#### Injectable Naltrexone

- ► Released Spring 2006
- ► Monthly, sustained release
- Avoids major adherence problems
- Appears to have less liver toxicity, nausea
- Probably more effective than oral naltrexone <sup>1</sup>
- ► Approx \$1300/month

Lee, J Subst Abuse Treat 2012

#### How about Acamprosate?

- Used in Europe for 20 years, 2004 FDA approval
- Calcium homotaurinate, an amino acid derivative
- Causes a decrease in craving for alcohol<sup>1</sup>
- ▶ If patient drinks, makes drinking less pleasurable
- Therefore, decreases risk of relapse and makes relapse shorter

Franck, Curr Opin Neurobiol, 2013

#### Does Acamprosate work?

- Meta-analysis of placebo-control trials
- ▶ 17 trials in 13 countries incl 4087 pts <sup>1</sup>
- ► Endpoint abstinence rate at 6 months
- ▶ 36% of pts on Acamprosate and 23.4% of placebo pts were abstinent at 6 months.
- Cochrane review calculated RR of drinking .86 while on acamprosate <sup>2</sup>
- ▶ By comparison, aspirin yields RR of about .9 for primary prevention of heart attack ³

<sup>2.</sup> Roser, Cochrane Database Syst Rev 2010

#### How to Use Acamprosate

- ► 666 mg (comes in 333 mg) 3x per day: may be adherence problem
- Begin as soon as possible after alcohol withdrawal but not when either intoxicated or withdrawing
- Continue even if patient relapses
- Safe to use with liver dysfunction
- Causes diarrhea, gas, bloating; improves over time

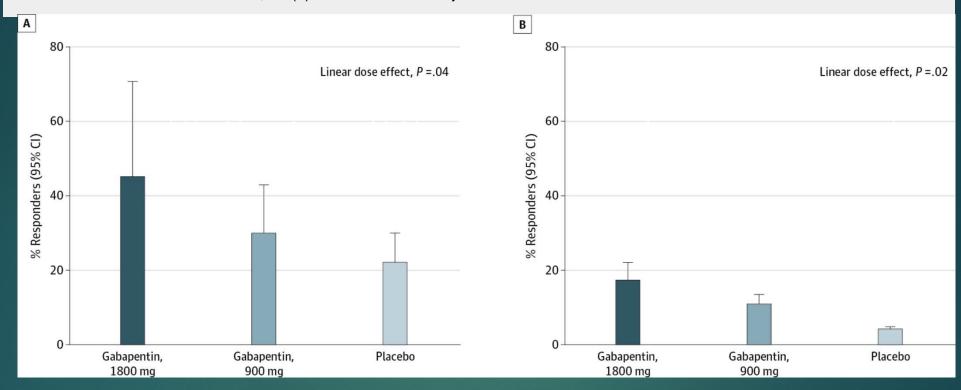
#### Topiramate<sup>®</sup>

- Not FDA approved for use in alcoholism (off-label use)
- When started during active alcohol use, facilitates taper, abstinence
- ▶ Increased days abstinent from 29 to 38%
- Requires slow induction
- Unpleasant side-effects: metabolic acidosis, paraesthesias, mental slowing

#### Gabapentin to reduce relapse

#### From: Gabapentin Treatment for Alcohol Dependence: A Randomized Clinical Trial

JAMA Intern Med. 2014;174(1):70-77. doi:10.1001/jamainternmed.2013.11950



#### Figure Legend:

Gabapentin Effects on Rates of No Heavy Drinking and Complete Abstinence During the 12-Week Study in the Intention-to-Treat Population A, No heavy drinking; B, complete abstinence. Error bars indicate 95% confidence intervals (N = 150). Mason, B.

#### How to choose a medication?

- Naltrexone is the most widely used, and has the best evidence
  - ▶ Later age of onset of AUD
  - ▶ Helps to decrease number of heavy drinking days
- Acamprosate works well for patients who have
  - prominent anxiety
  - prolonged withdrawal symptoms
  - can take a TID drug
  - Helps prolong abstinence

#### How to choose a medication?

- ▶ Gabapentin:
  - also helpful for anxiety
  - ▶ improves sleep
  - Appears to be effective for depressed patients when combined with SSRI
- ▶ Topiramate: some evidence that helps patients to "auto-taper"
- ▶ Disulfiram:
  - ▶ for patients who think it will work for them
  - Controlled setting where med is administered

▶ Ms. R is a 42 year old woman who just completed an inpatient detox from alcohol. She has a history of alcohol-withdrawal-related seizures. She has been attending AA but is asking for help, as she is having strong cravings to drink and is feeling anxious.

What are her medication options?

- ▶ Mr. T is a 25 year old man who just got his 2<sup>nd</sup> DWI charge. He binge drinks up to 18 beers on weekend days, and drinks at least a 6-pack every night. He is angry about the DWI charges, and says that he is not interested in stopping drinking. However, he also expresses concern that he could end up in jail or hurt someone.
- ► Can you help Mr. T?