



Pharmacotherapy  
for Alcohol  
Relapse  
Prevention

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# Presenter Disclosure

- Presenter: Jennifer Newman MPAS, CCPA
- Relationships with Commercial Interests:
  - None

# Objectives

1. Understand the indications, risks, benefits, side effects and contraindications of Naltrexone.
2. Understand the initiation, pre-testing, dosing, and monitoring of Naltrexone.
3. Understand the indications, risks, benefits, side effects and contraindications of Acamprosate.
4. Understand the initiation, pre-testing, dosing, and monitoring of Acamprosate

NOTE: Acamprosate is currently not available from the manufacturer.

# Naltrexone

- Opioid receptor antagonist.
- Blocks the effects of  $\mu$ -opioid receptors.

# Naltrexone

- There is a link between alcohol and opioid receptors of the mesolimbic (reward) system.
  - This is where Naltrexone works to decrease craving.
  - Reduced craving reduces the risk of relapse.

# Naltrexone

- Effective for reducing relapse and craving when used alone or in combination with behavioural therapies.
- Effective for blocking euphoria of alcohol use, this helps reduce duration and volume of relapse or binge episodes.
- Effective in preventing relapse to any drinking as well as relapse to heavy drinking (harm reduction).

# Naltrexone

## Initiation of Treatment

- Test serum liver enzyme levels
- AST must be within three times the upper limit of normal
  - Naltrexone can cause an acute hepatocellular injury
  - Relative contraindication if AST is above threshold (Acamprosate is first line in this case)
  - Often AST will normalize in just a few days with abstinence from alcohol
- Naltrexone is taken once daily, can be taken any time, with or without food.
- Side effects include:
  - Nausea, vomiting, decreased appetite
  - Dizziness, dysphoria, anxiety
  - Eosinophilic pneumonia
  - Hepatocellular injury

# Naltrexone

## Starting Dose

- Start low and increase slowly - this eliminates most side effects, especially the GI effects
- Initiate at 12.5mg PO OD for 3-4 days, then 25mg PO OD for 3-4 days, then 50mg PO OD

## Contraindications

- Conditions that require opioid pain management - Naltrexone blocks effect.
- If the need to manage severe pain develops simply stop Naltrexone.
- Use of Naltrexone in patients currently on opioids will cause severe precipitated withdrawal
- Do not combine with Disulfiram as this is also hepatotoxic (Also, don't use Disulfiram)



# Naltrexone

## Other Considerations

- Naltrexone is now on the provincial drug formulary, no EDS is required.
- Naltrexone is covered by NIHB.
- Cost per month ~\$180.
- Number needed to treat: 9.

# Acamprosate

- NMDA-receptor antagonist
- GABA<sub>a</sub>-receptor agonist
- Has effects on GABA, Glutamate, Serotonergic, noradrenergic, and dopaminergic receptors.

# Acamprosate

- Reduces alcohol relapse rates
- Is best started once withdrawal has resolved
- Safe to use in patients with elevated liver enzymes - not hepatotoxic

# Acamprosate

## Initiation of Acamprosate

- Confirm normal kidney function, okay to start in patients with  $\text{CrCl} \geq 60 \text{ml/min}$
- Acamprosate is taken three times daily at a target dose of 666mg per dose.

## Side effects include:

- GI upset, anxiety, insomnia, depression, dizziness, pruritis

# Acamprosate

## Starting Dose

- Start Acamprosate at 333mg PO TID for 7 days then increase to 666mg PO TID.

## Contraindications

- Severe renal impairment.
  - Contraindicated if eGFR <30
  - Use 333mg PO TID if eGFR 30-60

## Drug Interactions

- None known.

## Other considerations

- Acamprosate is now on the provincial drug formulary, no EDS is required.
- Acamprosate is covered by NIHB.
- Cost per month ~\$200
- Number needed to treat = 12

# Acamprosate and Naltrexone

## Recommended duration of treatment

- 6-12 months use is recommended
  - Allows for patients to adjust their habits, create support systems and get their social situations (housing, education, work, etc) in order.
- When patients are feeling ready to stop the medication, both can just be stopped without a withdrawal syndrome.
- One of two things will happen
  - Patients carry on and do well with no relapse or increase in cravings
  - Patients will have a noticeable increase in cravings and will start to struggle with increased risk of relapse
- If patients are struggling after stopping either of these meds it is recommended to resume treatment for up to 12 months or indefinitely.

# Citations

- Katzung, B.G. & Trevor, A.J. (2015) Basic and Clinical Pharmacology. 13th ed. New York, New York: Lange Medical Publications.
- Herron, Abigail J & Brennan, Timothy K. (2015) The ASAM Essentials of Addiction Medicine. 2nd ed. New York, New York: Wolters Kluwer.
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