**Financial Incentives, Randomization and Stepped Treatment:**

A Quick Guide of Medications for Alcohol Use Disorder

for Addiction Physician Management Visits



**Importance**

Medications for the treatment of alcohol use disorder are underused despite evidence demonstrating their utility in preventing relapse to alcohol use (1,2,3,4). Some FIRST trial patients will meet criteria for alcohol use disorder and these medications should be considered as part of Addiction Physician Management (1,2,4).

**Medications for Alcohol Use Disorder**

* The Food and Drug Administration (FDA) has approved three medications for the treatment of alcohol use disorder: disulfiram, acamprosate, and naltrexone. The VA/DOD Clinical Practice Guideline for the Management of Substance Use Disorders recommends their use in patients with alcohol use disorder (4).
  + Naltrexone is available in both oral and extended release injectable formulations.
  + For acamprosate and naltrexone, a brief period of abstinence before initiation is not mandatory but is associated with improved outcomes (2,4).
  + For disulfiram, abstinence before initiation and while taking the medication is required to avoid adverse effects.
  + Prescribing these medications in conjunction with a minimum of brief psychosocial counseling, such as Addiction Physician Management, typically results in the best outcomes (5).
* Non-FDA-approved medications, including gabapentin, topiramate, baclofen, ondansetron, and varenicline, have also been studied for the treatment of alcohol use disorder with variable outcomes.

**Medication Selection**

* Selecting a medication for a particular patient should take into consideration specific contraindications, potential drug interactions, the patient’s past experience with medications for alcohol use disorder, level of motivation for abstinence, and history of medication adherence (1).
* Naltrexone has strongest evidence for improving heavy drinking outcomes (3) and has been found to be safe and effective among patients living with HIV (6,7,8).

**Initiation & Monitoring**

* Prior to initiating a medication, providers should educate the patient about the medication being recommended (i.e., risks and benefits and alternative options). For certain medications, based on known cautions or contraindications, it may be necessary to perform a physical examination, baseline liver and kidney function tests, urine toxicology screen, electrocardiogram, and/or a pregnancy test in women (1).
* Patients should receive ongoing monitoring for alcohol use and response to treatment, as well as for any associated medical, psychiatric, and behavioral adverse effects (2). Periodic and symptom driven testing of liver function is appropriate for patients receiving naltrexone (2).

**Treatment Duration**

* The optimal duration of treatment with these medications is not known, but some evidence supports continuing treatment for at least six months to one year (1).
* Certain patients may benefit from short periods of treatment during anticipated stressful situations that may elicit cravings for alcohol (i.e. prescribing disulfiram or naltrexone to use while visiting family or friends who drink excessively).
* If office-based treatment is not effective or the provider lacks adequate resources to meet a particular patient’s needs, referral to more intensive or specialty care is appropriate (1,2).

**Table 1. FDA-approved Medications for Alcohol Use Disorder**

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| ***Medication (Typical Dosage)*** | ***Indication*** | ***Mechanism*** | ***Adverse Effects*** | ***Contraindications & Cautions*** | ***Notes*** |
| Naltrexone (oral 50-100 mg daily or intramuscular injectable 380 mg monthly) | Relapse prevention | Opioid antagonist that may reduce the subjective reward associated with alcohol use. | Nausea, indigestion, headache, fatigue, dizziness, insomnia, anxiety, somnolence.  Depression and suicidal ideation.  Rarely medication-associated hepatitis.  Potential for precipitated withdrawal if opioids present.  Injection-site reactions, asthenia, and rarely eosinophilic pneumonia with injectable formulation. | Current opioid use.  Decompensated cirrhosis, liver functions tests >5 times the upper limit of normal.  Use with caution with compensated cirrhosis.  Inadequate muscle mass for injectable formulation. | Consider injectable formulation if medication adherence is a concern. |
| Acamprosate (666 mg three times daily) | Relapse prevention | May antagonize glutamate-mediated neuronal hyperexcitability and reduce prolonged (but not acute) withdrawal symptoms. | Diarrhea, anxiety, asthenia, depression, suicidality, anxiety, nausea/vomiting, myalgia, rash, dizziness, palpitations.  Rarely associated with renal impairment. | Severe renal insufficiency CrCl <30; dose reduce to 333 mg TID for CrCl 30-50. | May be used with naltrexone.  Medication adherence may be challenging.  Monitor for depression/suicidality. |
| Disulfiram (250-500 mg daily) | Drinking and relapse prevention | Inhibits aldehyde dehydrogenase resulting in accumulation of acetaldehyde with alcohol use, leading to unpleasant symptoms (i.e. disulfiram-ethanol reaction). | Drowsiness, metallic taste, headache, rash.  Rarely medication-associated severe hepatotoxicity, optic neuritis, peripheral neuropathy, psychosis, delirium, severe disulfiram-ethanol reaction. | Presence of alcohol.  Severe cardiovascular, respiratory, or renal disease, hepatic impairment, and psychiatric disorders.  Combination with metronidazole or ketoconazole | Patient must be abstinent for at least 12 hours before administration.  Potential for many medication-medication interactions.  Most appropriate for patients with strong motivation to be abstinent and with support to promote medication adherence. |

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