ALCOHOL USE DISORDER

General Considerations:

1. Current evidence shows that medications are underused in the treatment of alcohol use disorder, including alcohol abuse and dependence. Clinicians should consider prescribing one of these medications when treating a patient who is dependent on alcohol or who has stopped drinking but is experiencing problems including cravings or relapses.

2. Medications should be prescribed as part of a comprehensive treatment approach that includes counseling and other psychosocial therapies and social supports through participation in Alcoholics Anonymous and other mutual-help programs.

3. SBIRT (Screening, Brief Intervention, and Referral to Treatment) can be used to screen for Alcohol Use Disorder.

Documentation

A. **FDA approved indications**

**First Line Agents:**

1. Naltrexone Oral (Alcohol Dependence)
2. Naltrexone for Extended-Release Injectable Suspension (Alcohol Dependence)
3. Acamprosate (Alcohol Dependence Maintenance Treatment)

**Second Line Agent:**

- Disulfiram (Alcohol Dependence)

B. **Non-FDA approved common uses:**

1. Gabapentin
2. Topiramate
3. Baclofen

C. **Minimal Documentation**

All standard outpatient & inpatient requirements

D. **Dosing Information**

(For more details refer to Medication Maximum Daily Dose (MDD Table) And PI for each drug for more details.)

Acamprosate: Requires dosage adjustment in moderate renal impairment (CrCl 30-50ml/min) and should not exceed 1tab tid).
Disulfiram: Disulfiram should never be administered to a patient who is in a state of alcohol intoxication, or without patient’s full knowledge.

Naltrexone Oral: 25mg/day for 7 days then 50mg once daily. Some studies have used 100mg daily. Caution advised for patients with Renal or Hepatic impairment.

Naltrexone IM: 380mg gluteal IM q4wks, alternate buttocks, use only the needle in the accompanying box. Must not be administered IV or SQ.

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### E. Duration of Use/Medication Changes

### F. Polypharmacy

Combining Medications: Combining medication, particularly those with different mechanisms of action, offers the possibility of more effective treatment for patients who do not respond adequately to an individual agent. However, two trials compared the combination of oral naltrexone and acamprosate, found mixed results. See Ref. list.

### H. Black Box Warnings (See Contraindications)

### I. Serious Side Effects

#### Disulfiram:
- Optic neuritis
- Peripheral neuritis, polyneuritis, peripheral neuropathy (complaints of numbness or tingling)
- Hepatitis, including cholestatic and fulminant hepatitis as well as hepatic failure

#### Acamprosate:
- Acute renal failure was temporally associated with Acamprosate.

#### Naltrexone:
- Dose dependent hepatotoxicity has been reported with Naltrexone.

#### Naltrexone IM:
- Serious injection site reactions
- Eosinophilic pneumonia
- Serious allergic reactions
- Accidental opioid overdose
- Depression and suicidality

J. **Drug Interactions: Refer to Epocrates/PI for details**

**Acamprosate:** Acamprosate is not hepatically metabolized and has no induction or inhibition potential on the cytochrome CYP1A2, 2C9, 2C19, 2D6, 2E1, or 3A4.

**Disulfiram:** Disulfiram may decrease the rate of metabolism of many drugs resulting in toxicity i.e. when given with Phenytoin (may result in Phenytoin toxicity). (Refer to Epocrates/PI for details).

**Documentation required**

I. **Standard laboratory and examination requirements**

1. For Inpatient: Basic laboratory studies on admission
2. For Outpatient:
   - Acamprosate: Panel 7 at baseline to assess renal function.
   - Disulfiram: Comprehensive metabolic panel at baseline & 10-14 days later to detect hepatic dysfunction.
   - Naltrexone: Comprehensive metabolic panel at baseline to assess renal and hepatic function.
   - Gamma-Glutamyl Transferase (GGT)

   Testing for vitamin deficiency

J. **Pregnancy and Lactation**
(Refer to Table 1)

**Contraindications**

1. Acamprosate: CI in patients with severe renal impairment (CrCl≤30ml/min) and in those who have a known hypersensitivity to the drug or its component.

2. Disulfiram: CI in the presence of severe myocardial disease or coronary occlusion, psychoses, pregnancy, and those with high levels of impulsivity, suicidality, and hypersensitivity to disulfiram or to other thiram derivatives used in pesticides and rubber vulcanization.
Contraindicated in patient who are taking or have recently taken metronidazole, paraldehyde, alcohol, or alcohol-containing preparations i.e. cough syrups, tonics.

3. **Naltrexone PO and IM:**
   A. Patients with acute hepatitis or liver failure (Naltrexone IM)
   B. In patient receiving opioid analgesics and those receiving long-term opioid therapy or anticipating a need for opioids (e.g. surgery).
   C. Patients currently dependent on opioids, including those being maintained on opioid agonists such as methadone or partial agonists such as buprenorphine.
   D. Patients in acute opioid withdrawal
   E. Patients who have failed the naloxone challenge test or whose urine tests positive for opioids.
   F. Patients with a hypersensitivity to naltrexone or its components.

**Documentation**

M. **Warnings/Precautions:** (Refer to Table 4 for Black Box Warnings and Pregnancy Categories)

**Disulfiram:**

1. Use with caution in patients with heart disease, diabetes, hypothyroidism, epilepsy, cerebral damage, chronic or acute nephritis, acute hepatitis or other hepatic disease, and in patients>60y.o.
2. Hepatotoxicity has occurred in patient with or without a h/o abnormal liver function. Patients should be advised to immediately notify their physician of any early sxs of hepatitis, including fatigue, weakness, malaise, anorexia, nausea, vomiting, jaundice, or dark urine.
3. Psychotic reactions have been noted, attributable to the unmasking of underlying psychoses in patients.

**Acamprosate:**

1. For patients with moderate renal impairment (Cr. Cl. 30-50ml/min), a reduced dose of acamprosate (one 333mg tablet 3 times a day) is recommended
2. Baseline and frequent renal function test are important in patients>65y.o. due to elevated risk of diminished renal function.

**Naltrexone:**
1. Use with caution in patients with moderate to severe renal impairment.
2. Patients should take no opioids, including opioid-containing medications, of a minimum of 7 to 10 days before starting naltrexone to avoid precipitating opioid withdrawal.
3. Patients should be told of the serious consequences of trying to overcome the opioid blockade.
5. Depression, suicide, attempted suicide and suicidal ideation have been reported in post marketing experience with REVIA used in the treatment of opioid dependence.

Attachments:

- Table 1: Pregnancy Categories & Nursing Mother
- Attachment 2: VMC; Algorithm for Pharmacologic Treatment to Reduce Heavy Alcohol Use

References:

2. PI for each of the above RXs.
3. National Institute on Alcohol Abuse and Alcoholism NIH Publication 07–3769
4. UpToDate 2018: Pharmacotherapy for alcohol use disorder
## Medications Used for the Treatment of Alcohol Use Disorder

### Table 1: Pregnancy Categories & Nursing Mother

<table>
<thead>
<tr>
<th>Agents</th>
<th>Brand</th>
<th>Pregnancy Category</th>
<th>Nursing Mother</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acamprosate</td>
<td>Campral</td>
<td>There are no adequate and well controlled studies in pregnant women. Acamprosate should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.</td>
<td>It is not known whether acamprosate is excreted in human milk. Caution should be exercised when Acamprosate is administered to nursing woman.</td>
</tr>
<tr>
<td>Disulfiram</td>
<td>Antabuse</td>
<td>The safe use of Disulfiram in pregnancy has not been established. Disulfiram should be used during pregnancy only when the probable benefits outweigh the possible risks.</td>
<td>It is not known whether disulfiram is excreted in human milk. Disulfiram should not be given to nursing mothers.</td>
</tr>
<tr>
<td>Naltrexone</td>
<td>ReVia, Vivitrol</td>
<td>There are no adequate and well-controlled studies in pregnant women. Naltrexone should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.</td>
<td>Whether or not Naltrexone is excreted in human milk is unknown. Caution should be exercised when Naltrexone is administered to a nursing woman.</td>
</tr>
</tbody>
</table>

**Attachment 2 Alcohol Use Disorder: Medication Selection Guideline**

### Naltrexone Candidate – IM
- AST or ALT < 150, INR ≤ 2.0?
- No long-acting opiates (i.e., MS Contin, Methadone) in last 2 weeks?
- No short-acting opiates in last 24 hours?
- No decompensated cirrhosis?
- Not pregnant?

### Gabapentin Candidate
- Creatinine Clearance > 30 ml/min?
- CIWA < 9?
- < 1 month of abstinence?
- If female, not pregnant?

### Gabapentin Candidates
- **SAFE to use with naltrexone**—prescribe only if adherence to a TID medication is not a concern OR
- When naltrexone is contraindicated

### Gabapentin Initiation
- Start 900 mg/day (300 mg every 8 hours)
- Uptitrater to 1800 mg/day (600 mg every 8 hours) after 3 days if safe/tolerated
- If Creatinine Clearance 31-59 ml/min do not uptitrater beyond 900 mg/day

### Gabapentin Follow-up
- PCP or PATCH
- Outpatient BH for therapy if amenable by completing Vivitrol and Counseling referral form in HealthLink

### Gabapentin Follow-up
- Start 900 mg/day (300 mg every 8 hours)
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### IM Naltrexone (Vivitrol) Candidate
- Continuing on IM Naltrexone OR
- Agrees to follow up for Vivitrol #2 in 1 month, not use opiates, and receive further treatment

### IM Naltrexone (Vivitrol) Referral
- Refer to DADS by completing Vivitrol and Counseling Referral Form in HealthLink; give patient f/u appointment prior to discharge

### IM Naltrexone (Vivitrol) Initiation
- Vivitrol 380 mg IM x 1 prior to discharge, then 380mg IM every 30 days on discharge
- Assess gabapentin candidacy

### Medication Ineligible
- **Vivitrol Ineligible:** AST or ALT > 150, INR > 2.0, long-acting opiates, short-acting opiates, decompensated cirrhosis, pregnant
- **Gabapentin Ineligible:** Creatinine Clearance < 30 ml/min, pregnant
- Declines medication

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### Gabapentin Candidates
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- Start 900 mg/day (300 mg every 8 hours)
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Universal Screening for Alcohol Use Disorder: AUDIT-C by Bedside Nurse

- How often do you have a drink containing alcohol?
- How many standard drinks containing alcohol do you have on a typical day?
- How often do you have 6 or more drinks on one occasion?

Negative Screen

- Women: 2 or less
- Men: 3 or less

Positive Screen

- BPA triggered -> Nurse places Social Work consult for SBIRT
- INR & LFTs if none during current admission (medicine team)

Social Worker performs SBIRT

- Screen, brief intervention, educate about EtOH use and programs

SW Brief Intervention

- Educate about safe drinking limits and resources
- Give information about AUD and community resources
- Watchful waiting

Interested in Behavioral Treatment Naltrexone and/or Gabapentin Eligible

- SW pages attending and resident (saw patient, yes/no interested in medication and/or counseling
- Primary team offers patients Vivitrol (preferable) and/or Gabapentin and sends HL communication sheet for Vivitrol #2 and/or counseling.
- DADS pages primary team with f/u appointment for patient before discharge.

Interested in Behavioral Treatment Medication Ineligible

- Primary team sends HL communication sheet for counseling to DADS
- DADS pages primary team with f/u appointment for patient before discharge

LCSW Consult placed by SW

- Brief intervention, ASAM, and referral to higher level of care if indicated.

Highly motivated, needs for higher level of care & DADS services

Declines Behavioral and Medication Treatment

- SW gives information about alcohol use disorder and community resources
- Watchful waiting

Audit for Alcohol Use Disorder (AUD): Screening and Treatment Guideline

Social Worker performs SBIRT

- Screen, brief intervention, educate about EtOH use and programs

No AUD, pre-contemplative

- SW Brief Intervention

AUD, motivated, but can wait for outpatient counseling

- SW Brief Intervention

Interested in Behavioral Treatment

- Primary team sends HL communication sheet for counseling to DADS
- DADS pages primary team with f/u appointment for patient before discharge

LCSW Consult placed by SW

- Brief intervention, ASAM, and referral to higher level of care if indicated.