Supplemental Materials Treatment of Alcohol Use Disorder in Patients with Liver Disease

Deep Dive – Naltrexone in ALD

- You are rotating on the addiction medicine service and are asked to provide medication recs for the following patient: A 52-year-old with alcohol-associated cirrhosis (MELD-Na 11; Child-Pugh A) admitted 3 days ago for volume management, now medically stable.
- Alcohol pattern: binge drinking Fri–Sun; last drink 9 days ago; motivated to reduce heavy episodes.
- Co-occurring: pruritus at night, intermittent migraines; no active opioid use, no anticipated procedures that would require opioids.
- Meds: spironolactone 50 mg, furosemide 20 mg, lactulose PRN (stopped 3 weeks ago), propranolol 10 mg BID.
- Vitals: stable. Physical Exam: mild palmar erythema; no asterixis; no ascites today.
- Labs (today):
    - AST 46 U/L, ALT 34 U/L
    - ALP 118 U/L, Tbili 1.2 mg/dL, Albumin 3.8 g/dL
    - INR 1.2, Platelets 128k
    - Cr 0.9 mg/dL, Na 138 mmol/L
- Imaging: US last month: nodular contour, portal vein patent, no masses.
- You cue in to the fact that this patient's primary goal is to reduce overall drinking, not abstinence and immediately think of naltrexone. However, you remember warnings about “hepatotoxicity” and hesitate.

Naltrexone in ALD Question:

- Would you prescribe oral naltrexone 50 mg daily to this patient at discharge?

Vignette A – Compensated Cirrhosis (Child-Pugh A)

- A 54-year-old man presents for routine follow-up after an abdominal ultrasound performed for abnormal liver enzymes revealed a nodular liver consistent with cirrhosis. He reports drinking 4–6 beers daily for the past 25 years. He denies abdominal swelling, confusion, hematemesis, melena, or lower extremity edema.
- He has no history of viral hepatitis. Workup for other causes of liver disease is negative. His laboratory studies show:
    - AST: 92 U/L
    - ALT: 48 U/L
    - AST:ALT ratio >2
    - Total bilirubin: 1.4 mg/dL
    - Albumin: 3.8 g/dL
    - INR: 1.1
    - Creatinine 0.48
    - Platelets: 120,000/mm^3
- Abdominal ultrasound shows a nodular liver without ascites. Upper endoscopy reveals small esophageal varices without bleeding.
- He is diagnosed with compensated alcohol-associated cirrhosis (Child-Pugh Class A).
- When informed of the diagnosis, he states “I know I probably drink too much, but I’ve never had withdrawal or legal problems. I don’t think I’m an alcoholic.”

Vignette A Questions:

- Which medication(s) do you start today?
- What monitoring will you order?
- What brief counseling message will you add?

Vignette B – Decompensated Cirrhosis (Child-Pugh B)

- A 57-year-old man with a history of heavy alcohol use (8–10 drinks daily for 30 years) is seen in hepatology clinic for follow-up after hospitalization 3 months ago for confusion and lethargy. During that admission, he was diagnosed with hepatic encephalopathy and decompensated cirrhosis due to alcohol use. He was started on lactulose and rifaximin with improvement in mental status. Since discharge, he reports 3–4 soft bowel movements daily on lactulose and denies recurrent confusion. However, he admits he has resumed drinking "a few beers on weekends." He reports abdominal distension controlled with diuretics. No recent hematemesis or melena. He carries a diagnosis of decompensated alcohol-associated cirrhosis complicated by ascites and hepatic encephalopathy, currently controlled on lactulose, rifaximin, furosemide, and spironolactone.
- Physical Examination is notable for mild scleral icterus, ascites, with no asterixis.
- BP: 108/64 mmHg
- HR: 82/min
- Laboratory studies show
    - Total bilirubin: 3.6 mg/dL
    - Albumin: 2.8 g/dL
    - INR: 1.8
    - AST: 105 U/L
    - ALT: 52 U/L
    - Platelets: 85,000/mm^3
    - Sodium: 130 mEq/L
    - Creatinine 0.48

Vignette B Questions:

- Start/avoid which MAUD(s)?
- What dose and what to watch for?

Vignette C – Decompensated with CKD (GFR between 33-50)

- A 57-year-old man with a history of heavy alcohol use (8–10 drinks daily for 30 years) is seen in hepatology clinic for follow-up after hospitalization 3 months ago for confusion and lethargy. During that admission, he was diagnosed with hepatic encephalopathy and decompensated cirrhosis due to alcohol use. He was started on lactulose and rifaximin with improvement in mental status. Since discharge, he reports 3–4 soft bowel movements daily on lactulose and denies recurrent confusion. However, he admits he has resumed drinking "a few beers on weekends." He reports abdominal distension controlled with diuretics. No recent hematemesis or melena. He carries a diagnosis of decompensated alcohol-associated cirrhosis complicated by ascites and hepatic encephalopathy, currently controlled on lactulose, rifaximin, furosemide, and spironolactone.
- Physical Examination is notable for mild scleral icterus, ascites, with no asterixis.
- BP: 108/64 mmHg
- HR: 82/min
- Laboratory studies show
    - Total bilirubin: 3.6 mg/dL
    - Albumin: 2.8 g/dL
    - INR: 1.8
    - AST: 105 U/L
    - ALT: 52 U/L
    - Platelets: 85,000/mm^3
    - Sodium: 130 mEq/L
    - Creatinine 1.86; GFR 33-50

Vignette C Questions:

- Which med & dose?
- What adjustments are needed?

Vignette D – Decompensated with CKD (GF< 33)

- A 57-year-old man with a history of heavy alcohol use (8–10 drinks daily for 30 years) is seen in hepatology clinic for follow-up after hospitalization 3 months ago for confusion and lethargy. During that admission, he was diagnosed with hepatic encephalopathy and decompensated cirrhosis due to alcohol use. He was started on lactulose and rifaximin with improvement in mental status. Since discharge, he reports 3–4 soft bowel movements daily on lactulose and denies recurrent confusion. However, he admits he has resumed drinking "a few beers on weekends." He reports abdominal distension controlled with diuretics. No recent hematemesis or melena. He carries a diagnosis of decompensated alcohol-associated cirrhosis complicated by ascites and hepatic encephalopathy, currently controlled on lactulose, rifaximin, furosemide, and spironolactone.
- Physical Examination is notable for mild scleral icterus, ascites, with no asterixis.
- BP: 108/64 mmHg
- HR: 82/min
- Laboratory studies show
    - Total bilirubin: 3.6 mg/dL
    - Albumin: 2.8 g/dL
    - INR: 1.8
    - AST: 105 U/L
    - ALT: 52 U/L
    - Platelets: 85,000/mm^3
    - Sodium: 130 mEq/L
    - Creatinine 2.34; GFR <33

Vignette D Questions:

- Which med & dose?
- What adjustments are needed now?

Withdrawal Vignette – Admitted for AWS + ALD

- A 50 year old women is admitted to the hospital with tremors, anxiety, and diaphoresis concerning for alcohol withdrawal. She has a history of drinking up to 1 bottle a day of wine for 15 years, which escalated to 2-3 bottles per day in the last year which she attributes to her divorce. Her last drink was yesterday. She quit "cold turkey" after concerns about her health due to progressive abdominal swelling.
- Vitals are notable for a heart rate of 110 and her exam is notable for her being anxious appearing, and moderately tremulous. She has a distended abdomen and bilateral pitting edema. No asterixis.
- Labs are notable for:
    - Platelets 89
    - CMP: Na 132, AST 137, ALT 62, Total bilirubin: 3.2, Albumin 3.0
    - CIWA 17

Withdrawal Vignette Question 1: Which of the following is the most appropriate pharmacotherapy for managing her alcohol withdrawal?

- Scheduled Diazepam
- Symptom Triggered Lorazepam
- Loading and then tapering of Gabapentin
- Loading and then tapering of Phenobarbital

Withdrawal Vignette Question 2: Used as adjuncts to benzodiazepines in the treatment of alcohol withdrawal, which of the following medications would not be appropriate for a patient with liver disease?

- Carbamazepine
- Clonidine
- Gabapentin
- Valproic Acid

MI Vignette: "I Googled It and Now I'm Scared"

- You are seeing Mr. J, a 45-year-old with alcohol-associated liver disease (Child-Pugh A) in follow-up clinic.
- The Patient's Opening Line: "So… I asked ChatGPT about these AUD meds, and it said naltrexone can cause liver failure. And another website said acamprosate gives diarrhea and won't help unless I stop drinking completely. Honestly, I don't think meds are for me. I just need more willpower." He crosses his arms, avoids eye contact, and says he's "not sure about changing anything right now."
- Current Alcohol Use
    - Drinks 2–3 beers nightly, but 6–10 beers on weekends
    - Has tried to cut down several times but struggles with cravings, stress, and habit
    - Says he is "not ready to quit entirely"
- History & Symptoms
    - Mild anxiety, "busy mind at night"
    - Occasional pruritus
    - No opioid use
    - No history of hepatic encephalopathy
    - Lives alone; limited social support.
- Pertinent Lab Findings:
    - AST 58
    - ALT 46
    - Tbili 1.3
    - Albumin 4.2
    - INR 1.1
    - Creatinine 0.9
    - eGFR 95
- Imaging: cirrhotic morphology; no ascites; portal vein patent.

MI Vignette Task (Pairs/Trios, 5–6 Minutes)

- What is the patient's ambivalence? Identify BOTH sides: "What he wants" + "What he fears."
- Using MI, how would you respond to his opening line? (Provide one reflection, one affirmation, and one open question. Avoid persuading or correcting at first.)
- How would you explore his goals if he says he doesn't want to quit entirely?
- If he does become curious about options, what MAUD(s) could fit?