Alternative treatment of alcohol withdrawal

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Disclosures

- None relevant to this presentation

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Case presentation

- 45 year-old married man
- Hospitalized psychiatrically for suicidal ideation of shooting himself
- Stresses
  - finances
  - upcoming anniversary of father’s death about 14 years ago, and Father’s Day

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Case: Medical history

- Hypertension
  - Atenolol 50 mg qday
- Diabetes type II
  - Metformin 500 mg b.i.d.
- Depression and anxiety
  - duloxetine (Cymbalta)
- History of kidney stones

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Case: Alcohol use

- Regular alcohol use x 1 year (he said a provider recommended 4 beers/day to help with kidney stones)
- Found alcohol helpful for depression/anxiety
- Recently drinking 1 bottle wine/day
- Last alcohol use 12 hours ago
- Longest abstinence 1.5 weeks
- Has experienced withdrawal symptoms: diaphoresis, nausea, anxiety

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Case: Laboratories and Vitals

- Laboratories
  - CBC (including MCV) normal
  - AST, ALT, GGT normal
  - Electrolytes (including creatinine) normal
  - Breath alcohol 0.0
- Vitals
  - BP 160/110, P 121
  - Baseline BP 113-145/62-91, P 61-69

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Alcohol withdrawal

- Lifetime alcohol use disorder: 20% of men, 10% of women
- 50% of patients experience alcohol withdrawal
  - 3-5% may experience seizures or delirium
- Symptoms begin within 8 hours after blood alcohol levels decrease
- Symptoms peak at 72 hours
- Markedly reduced by days 5-7 of abstinence

Schuckit MA. N Engl J Med 2014;371:2109-13

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Alcohol withdrawal: Benzodiazepines

- One approach – symptom-triggered
  - lorazepam (Ativan) 1-4 mg PO/IV qhour if CIWA-R > 10
- CIWA-R
  - 10 questions on scale of 0-7
  - Nausea/vomiting, agitation, headache, tremor, anxiety, tactile, orientation, sweats, auditory/visual perceptual disturbances

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Alcohol withdrawal: Benzodiazepine disadvantages

- Use of benzodiazepines in alcohol-dependent person
- CIWA-R protocol resulting in too much benzodiazepine use
  - Several CIWA-R items are subjective
- Potential interactions with alcohol
  - Suppressing respirations

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Gabapentin (Neurontin)

- Structurally related to GABA (gamma-aminobutyric acid)
- FDA-approved anticonvulsant
- Renal excretion
- In alcohol withdrawal states, there is a lack of GABA
- Clinically, has mild sedative and anxiolytic properties
- Is not addictive (generally)

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Gabapentin for alcohol withdrawal

- 2015 review of gabapentin for alcohol withdrawal: 5 articles (2003-2010)
- Sample sizes from 26-100
- Different settings: 2 outpatient, 3 inpatient
- Excludes clinically severe conditions (severe alcohol withdrawal, delirium, seizures)

Leung JG. Ann Pharmacotherapy 2015;49(8):897-906

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Gabapentin for alcohol withdrawal: summary

- Small evidence base
- Can be used for **mild** alcohol withdrawal
  - Maybe for moderate withdrawal?
  - not for severe withdrawal, seizures, delirium
- Other advantages from one of the studies
  - Less daytime sedation
  - Less return to alcohol use

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Clinical implementation

- Ensure normal kidney function
- Continue CIWA monitoring
- Schedule gabapentin
  - Days 1-4: 900 mg t.i.d.
  - Days 5-7: 600 mg t.i.d.
  - Days 8-9: 300 mg t.i.d.
  - After day 9: stop or continue

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Clinical implementation

- For hypertension, consider clonidine 0.1 mg b.i.d. p.r.n.
- For hallucinations, consider thiothixene, olanzapine, or haloperidol
- For severe withdrawal (vital sign instability, tactile hallucinations) or history of withdrawal seizures, consider divalproate 750 mg b.i.d x 1 day, then 500 mg b.i.d. x 5 days, then 250 mg b.i.d. x 3 days

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Caveats

- Described clinical implementation is not based on exact evidence in terms of dosing and duration
  - Existing evidence used gabapentin 2400 mg/day maximum
- Use benzodiazepines for rescue
- Still need more experience and evidence before technique can be considered for larger use

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Thank you!

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