Gabapentin for alcohol use disorder

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Clinical question

Is gabapentin an effective treatment for alcohol use disorder (AUD)?

Bottom line

Gabapentin treatment avoided more heavy drinking days (>5 standard drinks/day) than placebo (27% vs 9%). Gabapentin can be a second-line, off-label option to treat AUD. However, there is mixed evidence and concerns about abuse-misuse, and drug-related harms.

Evidence

Results are statistically significant unless indicated.

- A meta-analysis[1] (7 RCTs; 3 to 26 weeks; N=730) compared daily gabapentin doses of 300 to 3600 mg with placebo for treatment of AUD; most included regular follow-up visits after about 3 days of abstinence.
  -Gabapentin decreased the percentage of heavy drinking days (no absolute numbers reported). There was no difference in total abstinence. The gabapentin group had 10% more adverse events (AEs; no serious AEs reported).
- An RCT[2] comparing gabapentin to placebo (90 patients; mean age of 50 years; 77% male; average of 11 drinks/day) used an objective urine test to confirm drinking or abstinence. For 16 weeks, 1200 mg of gabapentin daily increased the number of no heavy drinking days (27% vs 9% placebo; number needed to treat [NNT] of 6). Total abstinence increased (18% gabapentin vs 4% placebo; NNT=8). Patients with more alcohol withdrawal symptoms benefited more. Dizziness was an AE (56% gabapentin vs 33% placebo; number needed to harm of 4).

Context

- Gabapentin can be a second-line, off-label treatment for moderate to severe AUD.[3] Recommended as first-line are acamprosate (NNT=12) and naltrexone (NNT=20).[3,4]
- Gabapentin misuse in the general population is about 1%, and up to 15% to 22% in patients with a history of opioid abuse. Risk with alcohol abuse history is less clear.[5]
- Gabapentin-related cases reported to US poison control centres increased by 72% between 2013 and 2017, including a 120% increase in abuse-misuse and an 80% increase in suicidality.[6]
- Patients prescribed gabapentin for any reason had double the death rate of the general population (relative risk of 2.16), and might be at higher baseline risk.[7] Excess alcohol also increases mortality.[8]
- Clinicians should be aware of potential misuse-diversion when prescribing gabapentin.[9]

Implementation

About 20% of Canadians aged 15 years or older will have AUD.[10] Risky drinking is associated with higher rates of premature death, disability, comorbidity, reduced productivity, and financial burden to both the individual and society (eg, impaired driving, family conflict, and health care costs).[11] The benefits of treatment need to be weighed against the harms of the condition. Take caution in those with a history of substance use disorder and coprescribed opioids.[12]

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Competing interests
None declared

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