

When to use an anticonvulsant to treat alcohol withdrawal

Scott A. Simpson, MD, MPH

Dr. Simpson is Medical Director of Psychiatric Emergency Services, Denver Health Medical Center, Denver, Colorado, and Assistant Professor of Psychiatry, University of Colorado School of Medicine, Aurora, Colorado.

Disclosure

The author reports no financial relationships with any company whose products are mentioned in this article or with manufacturers of competing products.

Alcohol withdrawal is an uncomfortable and potentially life-threatening condition that must be treated before patients can achieve sobriety. Benzodiazepines remain the first-line treatment for alcohol withdrawal; however, these agents could:

- exacerbate agitation
- interact adversely with other medications, particularly opioids
- be unsafe for outpatients at risk of drinking again.

Off-label use of anticonvulsants could reduce these risks. In our emergency department, we routinely use these agents as monotherapy for patients discharging to outpatient detoxification or as adjunctive treatment for patients who require admission for severe withdrawal (*Table*^{1,2}).

Gabapentin is safe for patients with liver disease and has few drug–drug interactions.¹ Dosages of at least 1,200 mg/d seems to be comparable to lorazepam for alcohol withdrawal and could help prevent relapse after the withdrawal period.¹ Many patients report that gabapentin helps them sleep. Gabapentin could cause gastrointestinal upset or slight dizziness; patients with severe renal disease might require dosage adjustments.

Carbamazepine. In a randomized double-blind trial, carbamazepine was superior to lorazepam in preventing rebound withdrawal symptoms and reducing post-treatment drinking, although both agents were effective in decreasing withdrawal

Table
Anticonvulsant regimens for treating alcohol withdrawal

Gabapentin	400 mg, every 8 hours, for 3 days, then 400 mg, twice a day, for 1 day or may be continued indefinitely for relapse prevention ¹
Carbamazepine	400 mg, twice a day, taper to 200 mg over 5 days ²
Divalproex	500 mg, every 8 hours, for 7 days to augment as-needed benzodiazepines

symptoms.² Avoid this agent in patients with serum liver enzymes 3 times higher than normal values, renal disease, neuropathy, thrombocytopenia, or leukopenia. Drug–drug interactions typically are not of concern unless a patient takes carbamazepine for several weeks.

Divalproex with as-needed benzodiazepines reduces the duration of withdrawal and risk of medical complications.³ Avoid using divalproex in patients with thrombocytopenia, leukopenia, or severe liver disease.

References

1. Myrick H, Malcolm R, Randall PK, et al. A double-blind trial of gabapentin versus lorazepam in the treatment of alcohol withdrawal. *Alcohol Clin Exp Res.* 2009;33(9):1582-1588.
2. Malcom R, Myrick H, Roberts J, et al. The effects of carbamazepine and lorazepam on a single versus multiple previous alcohol withdrawals in an outpatient randomized trial. *J Gen Int Med.* 2002;17(5):349-355.
3. Eyer F, Schreckenber M, Adorjan K, et al. Carbamazepine and valproate as adjuncts in the treatment of alcohol withdrawal syndrome: a retrospective cohort study. *Alcohol.* 2011;46(2):177-184.