Gabapentin versus chlordiazepoxide for outpatient alcohol detoxification treatment

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Abstract

BACKGROUND:
Benzodiazepines are used to treat alcohol withdrawal (AW) but cause cognitive impairment, sedation, and ataxia, and interact with alcohol. Nonbenzodiazepine anticonvulsants are promising and possibly safer alternatives for the treatment of AW.

OBJECTIVE:
To compare follow-up measures of Epworth Sleepiness Scale (ESS), Penn Alcohol Craving Scale (PACS), ataxia rating, and Clinical Institute Withdrawal Assessment for Alcohol revised (CIWA-Ar) symptoms between alcohol-dependent individuals randomized to treatment with gabapentin or chlordiazepoxide.

METHODS:
A randomized, double-blind study was conducted in US veterans with alcohol withdrawal (DSM-IV criteria). Subjects requiring hospitalization or taking benzodiazepines or nonbenzodiazepine anticonvulsants were excluded. Twenty-six participants were randomized: 17 received gabapentin and 9 received chlordiazepoxide. Gabapentin doses were 1200 mg orally for 3 days, followed by 900 mg, 600 mg, and 300 mg for 1 day each. Chlordiazepoxide doses were 100 mg orally for 3 days, followed by 75 mg, 50 mg, and 25 mg for 1 day each. CIWA-Ar, ESS, PACS scales and evaluation for ataxia were administered daily.

RESULTS:
Follow-up mean ESS and PACS scores did not differ significantly between treatment groups in the early treatment period (days 1-4) but were lower (mean difference -3.70; 95% CI -7.21 to -0.19; $p = 0.04$) and (mean difference -6.05; 95% CI -12.82 to 0.72; $p = 0.08$), respectively, at the end of the treatment period (days 5-7) in gabapentin-treated subjects. CIWA-Ar scores were reduced similarly in both groups. Ataxia was not observed. No significant adverse events were noted. Limitations include our small sample size and 35% loss to follow-up at the end of the treatment period.

CONCLUSIONS:
In ambulatory veterans with symptoms of alcohol withdrawal, gabapentin treatment resulted in significantly greater reduction in sedation (ESS) and a trend to reduced alcohol craving (PACS) by the end of treatment compared to chlordiazepoxide treatment. Although limited by the small sample size, the suggestion of reduction in sleepiness and less craving warrants replication of the study with a larger sample.

TRIAL REGISTRATION:
ClinicalTrials.gov NCT01573052.
https://pubmed.ncbi.nlm.nih.gov/23780805/