Anticonvulsants for the treatment of alcohol withdrawal syndrome and alcohol use disorders

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Abstract

Alcoholic patients suffer from harmful allostatic neuroplastic changes in the brain causing an acute withdrawal syndrome upon cessation of drinking followed by a protracted abstinence syndrome and an increased risk of relapse to heavy drinking. Benzodiazepines have long been the treatment of choice for detoxifying patients and managing alcohol withdrawal syndrome (AWS). Non-benzodiazepine anticonvulsants (NBACs) are increasingly being used both for alcohol withdrawal management and for ongoing outpatient treatment of alcohol dependence, with the goal of either abstinence or harm reduction. This expert narrative review summarizes the scientific basis and clinical evidence supporting the use of NBACs in treating AWS and for reducing harmful drinking patterns. There is less evidence in support of NBAC therapy for AWS, with few placebo-controlled trials. Carbamazepine and gabapentin appear to be the most promising adjunctive treatments for AWS, and they may be useful as monotherapy in select cases, especially in outpatient settings and for the treatment of mild-tomoderate low-risk patients with the AWS. The body of evidence supporting the use of the NBACs for reducing harmful drinking in the outpatient setting is stronger. Topiramate appears to have a robust effect on reducing harmful drinking in alcoholics. Gabapentin is a potentially efficacious treatment for reducing the risk of relapse to harmful drinking patterns in outpatient management of alcoholism. Gabapentin's ease of use, rapid titration, good tolerability, and efficacy in both the withdrawal and chronic phases of treatment make it particularly appealing. In summary, several NBACs appear to be beneficial in treating AWS and alcohol use disorders.

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