Acamprosate for Alcohol Use Disorder

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Q. What is acamprosate?

A. Acamprosate, the calcium salt of N-acetyl homotaurine, is a functional glutamate antagonist. It is approved by the U.S. Food and Drug Administration (FDA) for use as an adjunct to psychosocial interventions in individuals with alcohol use disorder (AUD; Plosker, 2015). Acamprosate is indicated for maintaining abstinence from alcohol in patients with alcohol dependence (Kranzler & Soyka, 2018). Acamprosate also has been shown to improve treatment retention, and is generally well tolerated.

Q. What are the potential mechanisms of action underlying acamprosate for the treatment of AUD?

A. Acamprosate's mechanism of action is not well understood and has been controversial. Although several mechanisms have been proposed, acamprosate is generally believed to restore the balance between glutamate and GABA neurotransmission that is disturbed as a result of chronic alcohol exposure (Plosker, 2015).

Q. Is acamprosate recommended as a treatment for AUD in the Military Health System (MHS)?

A. Yes. The *2015 VA/DoD Clinical Practice Guideline for the Management of Substance Use Disorders (SUDs)* recommends acamprosate for the treatment of patients with moderate to severe AUD, with a "strong for" strength of recommendation. Acamprosate, like all first-line pharmacotherapies for SUDs, is recommended to be used in conjunction with a psychosocial intervention.

The MHS relies on the VA/DoD clinical practice guidelines (CPGs) to inform best clinical practices. The CPGs are developed under the purview of clinical experts and are derived through a transparent and systematic approach that includes, but is not limited to, systematic reviews of the literature on a given topic and development of recommendations using a graded system that takes into account the overall quality of the evidence and the magnitude of the net benefit of the recommendation. A further description of this process and CPGs on specific topics can be found on the VA clinical practice guidelines website.

Q. Do other authoritative reviews recommend acamprosate as a treatment for AUD?

A. Yes. Other authoritative reviews have substantiated the use of acamprosate for treating AUD.

Several other recognized organizations conduct systematic reviews and evidence syntheses on psychological health topics using similar grading systems as the VA/DoD CPGs. These include the Agency for Healthcare Research and Quality (AHRQ) and Cochrane.

- AHRQ: A 2014 review of the comparative effectiveness of pharmacotherapy for adults with AUD in the outpatient setting found that acamprosate and oral naltrexone had the best evidence for treatment of AUD, and that head-to-head trials had not consistently supported the superiority of one of these medications over the other (Jonas et al., 2014).
- Cochrane: A 2010 systematic review of 24 randomized controlled trials of acamprosate for alcohol dependence found that it significantly reduced the risk of any drinking and significantly increased the duration of abstinence compared to placebo (Rosner et al., 2010). The only side effect reported more frequently in participants taking acamprosate than placebo was diarrhea.

Q. What conclusions can be drawn about the use of acamprosate as a treatment for AUD in the MHS?

A. Acamprosate, in conjunction with an evidence-based psychosocial intervention, is recommended as a first-line treatment for patients who have moderate to severe AUD. The 2015 VA/DoD CPG for SUD noted that patients who are highly motivated, abstinent, and not discouraged by the dosing burden (three times per day) are well suited for acamprosate. In addition, treatment decisions should generally incorporate

clinical judgment and expertise, patient characteristics and treatment history, and patient preferences that might influence treatment engagement and retention.

Refer to the *2015 VA/DoD Clinical Practice Guideline for the Management of Substance Use Disorders* for specific information about indications, contraindications, warnings/precautions, and other administration and procedural guidelines for the use of acamprosate.

References

Department of Veterans Affairs/Department of Defense. (2015). *VA/DoD clinical practice guideline for the management of substance use disorders. Version 3.0*. Washington, DC: Department of Veterans Affairs/Department of Defense.

Jonas, D. E., Amick, H. R., Feltner, C., Bobashev, G., Thomas, K., Wines, R., ... Garbutt, J. C. (2014). Pharmacotherapy for adults with alcohol-use disorders in outpatient settings (AHRQ Publication No. 14-EHC029-EF). Rockville, MD: Agency for Healthcare Research and Quality.

Kranzler, H. R., & Soyka, M. (2018). Diagnosis and pharmacotherapy of alcohol use disorder: A review. *JAMA*, *320*(8), 815–824.

Plosker, G. L. (2015). Acamprosate: A review of its use in alcohol dependence. *Drugs*, *75*(11), 1255–1268.

Rosner, S., Hackl-Herrwerth, A., Leucht, S., Lehert, P., Vecchi, S., & Soyka, M. (2010). Acamprosate for alcohol dependence. *Cochrane Database of Systematic Reviews*, *9*, CD004332.

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