



Bariatric Surgery, Alcohol Use Disorder, and GLP-Is

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Relationship between Bariatric Surgery and Alcohol Use Disorder

Gastric bypass surgery (GBS) changes how the body metabolizes alcohol, leaving people more likely to develop an alcohol use disorder (AUD). A study in JAMA from 2023¹ of a cohort of 7,694 patients who had gastric bypasses (vs sleeve gastrectomy vs a behavioral program) had 98% increased hospitalizations for alcohol-related conditions. It's thought that this is because of decreased ADH, an enzyme which begins metabolizing alcohol in the stomach. As alcohol largely bypasses the stomach, drinking produces increased rapid absorption and thus greater risk of higher intoxication levels. This can lead to the development of alcohol use disorder in some individuals. This group would include patients with histories of alcohol and other substance use disorders and those with family histories of AUD.

It is recommended that all patients undergoing GBS abstain from alcohol entirely for one year and then limit drinking to an occasional one.

Use of GLP-Is for the Treatment of Alcohol Use Disorders and Other Compulsive Behaviors

There are a number of neuropeptides which regulate appetite and weight. Neuropeptides are chemical messengers that act both within the nervous system and outside in several organ systems. These include orexin, neuropeptide Y, ghrelin, and leptin. Orexin promotes drinking and neuropeptide Y decreases drinking. Medications such as Ozempic are glucagon-like peptide-1 receptor (GLP-1) agonists and inhibit alcohol use, as well as potentially other compulsive behaviors such as gambling.

Recent Research on this Topic:

Title: Once-Weekly Semaglutide in Adults with Alcohol Use Disorder

Findings: In this randomized clinical trial, relative to placebo, low-dose semaglutide reduced the amount of alcohol consumed during a posttreatment laboratory self-administration procedure. Over nine weeks of treatment, semaglutide led to reductions in some but not all measures of weekly consumption, significantly reduced weekly alcohol craving relative to placebo, and led to greater relative reductions in cigarettes per day in a subgroup of participants with current cigarette use.

Reference: Hendershot CS, Bremner MP, Paladino MB, et al (2025). Once-Weekly Semaglutide in Adults with Alcohol Use Disorder: A Randomized Clinical Trial. *JAMA Psychiatry*. Retrieved from: https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2829811?guestAccessKey=45b19928-6f6d-4154-8963-888a3cfc394a&utm_source=silverchair&utm_medium=email&utm_campaign=article_alert-jamapsychiatry&utm_content=olf&utm_term=021225&adv=003509790492&asam.org

¹Mahmud N, Panchal S, Abu-Gazala S, Serper M, Lewis JD, Kaplan DE (2022). Association Between Bariatric Surgery and Alcohol Use–Related Hospitalization and All-Cause Mortality in a Veterans Affairs Cohort. *JAMA Surg*. 2023;158(2):162–

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