Weight-Loss Surgery Increases Alcohol Use Disorders Over Time

NIH-funded study sheds light on risk of bariatric procedures

Adults who had a common bariatric surgery to lose weight had a significantly higher risk of alcohol use disorders (AUD) two years after surgery, according to a study by a National Institutes of Health research consortium.

Researchers investigated alcohol consumption and alcohol use disorders symptoms in 1,945 participants from the NIH-funded Longitudinal Assessment of Bariatric Surgery (LABS), a prospective study of patients undergoing weight-loss surgery at one of ten hospitals across the United States.

Within 30 days before surgery, and again one and two years after surgery, study participants completed the Alcohol Use Disorders Identification (AUDIT) test. The test, developed by the World Health Organization, identifies symptoms of alcohol use disorders, a condition that includes alcohol abuse and dependence, commonly known as alcoholism.

Study participants were categorized as having AUD if they had at least one symptom of alcohol dependence, which included not being able to stop drinking once started, or alcohol-related harm, which included not being able to remember, or if their total AUDIT score was at least 8 (out of 40).

About 70 percent of the study participants had Roux-en-Y (RYGB) gastric bypass surgery, which reduces the size of the stomach and shortens the intestine, limiting food intake and the body's ability to absorb calories. Another 25 percent had laparoscopic adjustable gastric banding surgery, which makes the stomach smaller with an adjustable band. About 5 percent of the patients had other, less common weight-loss surgeries.

Among participants who had the RYGB procedure, seven percent reported symptoms of alcohol use disorders prior to surgery. There was no significant increase in AUD one year after surgery. However, by the second year after surgery, 10.7 percent of patients reported symptoms of AUD, a relative increase of more than 50 percent compared to pre-surgical rates.

One in eight LABS study participants reported having at least three drinks on a typical drinking day the second year after surgery. "This is concerning, given the negative impact heavy drinking may have on vitamin and mineral status, liver function and weight loss," said Dr. Wendy King, the study's lead author and an assistant professor in the Department of Epidemiology at the University of Pittsburgh Graduate School of Public Health.

Although AUD prior to surgery was one of the strongest predictors of AUD after surgery, more than half of study participants with AUD after surgery did not report having the condition during the year before surgery.

Regular alcohol use before surgery -- at least two drinks per week -- was also independently related to a higher risk of postoperative AUD. In addition to prior AUD and drinking frequency, patients with less social support or who reported preoperative recreational drug use or smoking before surgery were more likely to report symptoms of AUD after surgery. Men and younger adults were also more likely to develop AUD. Depressive symptoms, mental health treatment, and binge eating prior to surgery were not independently related to an increased likelihood of AUD after surgery.

Previous studies suggesting that bariatric surgery may increase the risk for alcohol use disorders were small, retrospective and used a variety of assessment methods.

To learn more about Alcohol and Alcoholism, click here.