Alcohol disorder screening tests fail in weight-loss surgery patients
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People who undergo Roux-en-Y gastric bypass surgery, a common type of bariatric surgery, are at increased risk for alcohol-related problems. However, common screening tools that help physicians identify patients at high risk for alcohol use disorder fail to work well in this population, according to a long-term, multicenter analysis led by University of Pittsburgh Graduate School of Public Health scientists.

The analysis, published today in the *Annals of Surgery*, also found that adults who underwent Roux-en-Y gastric bypass surgery steadily increased their frequency and quantity of alcohol consumption in the seven years following their surgery.

"Given the increased risk of alcohol use disorder associated with Roux-en-Y gastric bypass, the American Society for Metabolic and Bariatric Surgery recommends that clinicians screen for alcohol use disorder before and after surgery, but offers no guidance on how to do that screening," said senior author Wendy C. King, Ph.D., associate professor in Pitt Public Health’s Department of Epidemiology. "In the general population, the U.S. Preventive Services Task Force recommends using one of three specific alcohol screening tools. Our study determined that two of these tools, which assess frequency and quantity of alcohol intake, are inadequate among adults who have undergone Roux-en-Y gastric bypass. Rather, specific symptoms of alcohol use disorder, such as being unable to remember or failing to meet normal expectations because of drinking, should be assessed."

King and her colleagues evaluated 1,472 adults who had undergone Roux-en-Y gastric bypass surgery—a surgical procedure that significantly reduces the size of the stomach and changes connections with the small intestine—and completed alcohol screening pre- and post-surgery. The participants were enrolled in the National Institutes of Health-funded Longitudinal Assessment of Bariatric Surgery-2 (LABS-2), a prospective observational study of patients undergoing weight-loss surgery at one of 10 hospitals across the United States.

Studies have shown that following Roux-en-Y gastric bypass surgery, people experience higher peak alcohol concentrations and slower alcohol elimination compared to pre-surgery and peers who did not get surgery. In particular, research has shown that with a standard dose of alcohol, peak blood alcohol content is about two times higher post-surgery than pre-surgery. That suggests that the effect of consuming four drinks on one occasion post-surgery is similar to the effect of consuming eight drinks for someone who didn't get Roux-en-Y gastric bypass surgery.

"Roux-en-Y gastric bypass surgery results in long-term weight loss, remission of obesity-related conditions and reduced risk of premature death," said lead author Gretchen E. White, Ph.D., senior research analyst at the Pitt School of Medicine’s Department of Surgery. "However, our findings indicate that although patients steadily increase their alcohol consumption in the years following surgery, common screening tools are ineffective at identifying those at high risk of alcohol-related problems."

Prior to surgery and annually for up to seven years post-surgery, participants completed screenings for alcohol use disorder, which have been scientifically validated in the general U.S. population. Among 835 women who reported any alcohol consumption in the past year at one or more annual assessments, the screening failed to achieve the levels of sensitivity or specificity needed to give clinicians confidence that they are truly detecting or ruling out potential alcohol problems in the women who have undergone bariatric surgery.

Women made up 80 percent of the study.
participants, and not enough men completed the surveys to draw scientifically accurate conclusions about them. However, the researchers say there is no reason to believe the findings wouldn't extend to men.


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