Comparing Risk Factors for Pancreatitis After Laparoscopic Bariatric Surgery in the US

Background

The purpose of this study was to compare the risk factors for the development of pancreatitis after bariatric surgery in the US.

Methods

The Nationwide Readmissions Database for 2014 was queried for all patients undergoing elective laparoscopic sleeve gastrectomy or laparoscopic roux-en-y gastric bypass for weight loss. The primary outcome was the development of pancreatitis during index hospital admission or during a hospital readmission within one year. Univariable comparison was made using chi-squared tests and the statistically significant variables were then used with multivariable logistic regression for the primary outcome. Results were weighted for national estimates.

Results

There were 267,412 hospital admissions for bariatric surgery during the study period. Pancreatitis occurred in 985 (0.4%) of patients. Laparoscopic sleeve gastrectomy was performed on 168,756 (63.1%) patients. Pancreatitis occurred in 627 (0.4% p=0.7) of the patients who underwent laparoscopic sleeve gastrectomy. Multivariable logistic regression revealed that the risk factors for the development of pancreatitis included a history of chronic blood loss anemia (OR 3.6 [1.3-9.6] p=0.01), alcohol abuse (OR 2.5 [1.2-5.1] p=0.015), and a BMI >50 (OR 1.3 [1.2-1.5] p<0.001).

Conclusions

Pancreatitis after bariatric surgery is exceedingly rare. There is no difference between sleeve gastrectomy or roux-en-y gastric bypass in the incidence of pancreatitis. Understanding risk factors for pancreatitis after bariatric surgery could have an impact on patient selection and inform future studies of patients who undergo elective bariatric surgery in the US.