Preoperative Upper Endoscopy in Bariatric Patients: Evaluation of 1000 Patients

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Introduction

Some institutions perform routine preoperative upper endoscopy on all bariatric patients, though there is no definitive consensus on this practice. The aim of this study was to evaluate pathologic findings of patients undergoing upper endoscopy prior to bariatric surgery.

Methods

This is a retrospective analysis of 1000 patients undergoing bariatric surgery between January 2015 and December 2020 at a single institution. All patients underwent at least one upper endoscopy prior to surgery. Age, body mass index (BMI), gender, race, number of upper endoscopies, gross and microscopic pathology, presence of hiatal hernia, time from first endoscopy to surgery, and type of operation were included.

SG = Sleeve gastrectomy; RYGB = Roux-en-Y gastric bypass;
GIST = Gastrointestinal stromal tumor; NET = Neuroendocrine tumor

Table 1. Esophageal Findings

Esophageal Pathology	Total Number	%
Mild to moderate esophagitis	30	3
Gastroesophageal reflux	32.9	3.29
Erosive esophagitis	3	0.3
Barrett's esophagus	1	0.1
Leiomyoma	2	0.2
Esophageal ring	3	0.3
Varices	1	0.1
Polyp	1	0.1

Total = 73.9 (7.4%)

Table 2. Resected Gastric Masses

	Endoscopic Identification	Surgical Pathology	Surgical Identification	Total (%)
GIST	0	1 (0.1%)	9 (0.9%)	10 (1%)
Polyp	5 (0.5%)	8 (0.8%)	1 (0.1%)	14 (1.3%)
Tubular adenoma	0	1 (0.1%)	0	1 (0.1%)
NET	0	1 (0.1%)	0	1 (0.1%)
Ectopic tissue	2 (0.2%)	0	0	2 (0.2%)

Total = 28 (2.8%)

Table 3. Ulcers and Polyps Based on Location

	Ulcers		Polyps	
	Total Number	%	Total Number	%
Gastric	46	4.6	36	3.6
Duodenal	9	0.9	7	0.7
Esophageal	3	0.3	1	0.1
	Total = 58 (5.8%)		Total = 44 (4.4%)	

Results

The majority of patients were female (88.4%) and Black (79.7%). Mean age was 52 years with a mean BMI of 49. Seven hundred sixty-two patients underwent SG, 198 RYGB, and 40 underwent revision surgery. Hiatal hernias were present in 534 patients, with 95.8% of those identified preoperatively. Average time from endoscopy to surgery was 181.4 days (± 166.8 days) for all patients. Time from endoscopy to surgery was 334.8 days (± 348.2 days) for patients requiring additional preoperative endoscopy, compared to 169 days (± 135.4 days) for patients with a single scope ($p<0.001$).

Conclusions

Routine preoperative upper endoscopy is a useful adjunct in identifying multiple pathologies in bariatric patients.