ASSESSING GLUCAGON-LIKE PEPTIDE 1 RECEPTOR AGONIST EFFECTS ON RETAINED GASTRIC CONTENTS DURING EGDS OF BARIATRIC PATIENTS AND DEVELOPING A FOOD RETENTION GRADING SCALE

Yash Patel BS[1], Alice Gamble DO[2], George Malcolm Taylor IV MD[3], Theo Sher BA[1], Joseph Sujka MD[2], Christopher DuCoin MD, MPH[2], Francesca Dimou MD, MS[2], Salvatore Docimo DO, MBA[2]

[1]USF Health Morsani College of Medicine, [2]Department of Surgery, USF Health Morsani College of Medicine, [3]Department of Surgery, Brookwood Baptist Health, Birmingham, AL

INTRO

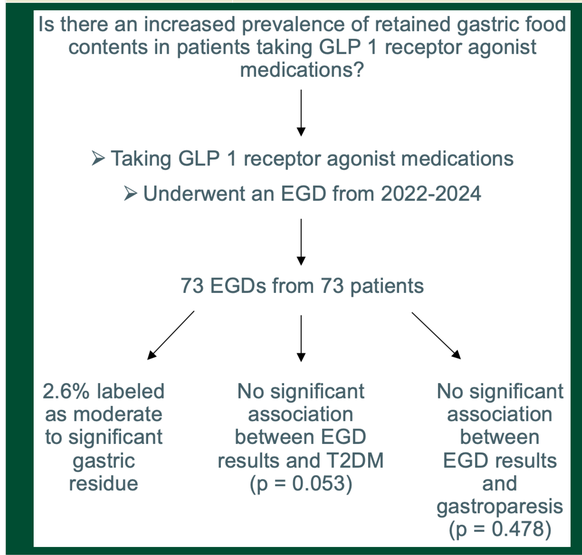
This study evaluated whether reduced gastric motility caused by glucagon-like peptide 1 (GLP 1) receptor agonist medications led to increased gastric food retention, raising the risk of aspiration during surgery. We hypothesized there was not an increased prevalence of retained gastric food contents in those taking GLP 1 receptor agonists, compared to those who are not. In addition, the study aimed to establish a standardized grading scale for quantifying gastric food retention.

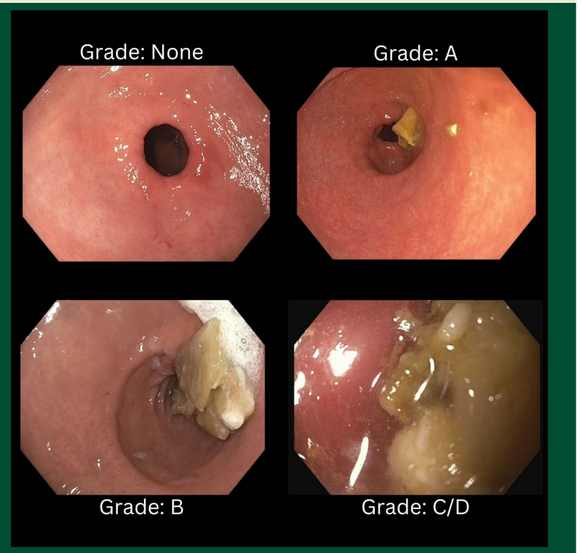
METHODS

Esophagogastroduodenoscopy (EGD) procedure impressions were used to evaluate gastric food retention at the pylorus as either None, Grade A, Grade B, Grade C, or Grade D. Data on patient diagnoses of gastroparesis and type 2 diabetes (T2DM) was also collected.

Tampa Gastric Residue Grading Scale

Grade	Description	Prevalence
None	No gastric residue	96.1%
A	Minimal gastric residue, pylorus easily visualized and not obstructed, EGD completed	1.3%
B	Moderate gastric residue, pylorus partially obstructed, EGD completed	2.6%
C	Significant gastric residue, pylorus not visualized, EGD completed	0%
D	Significant gastric residue, pylorus not visualized, EGD aborted	0%





RESULTS

There were no significant associations between gastric residue grading and diagnoses of T2DM (p=0.053) or gastroparesis (p=0.478). Of the 73 EGDs, 97.4% had minimal to absent amounts of gastric residue and 2.6% had moderate to significant gastric residue. No cases were aborted due to significant gastric residue.

CONCLUSIONS

Previous studies have shown a gastric residue prevalence of 3% to 3.5% in patients not taking GLP 1 receptor agonists, as compared to the 2.8% that were labeled as moderate to significant gastric residue in this study. Our initial data suggests these medications do not lead to substantial gastric food retention observed in EGDs.

USF Health
Morsani College of Medicine