

Conclusion: A prospective cohort study was done in recent years in 5 Nordic Countries to measure the risk of developing esophageal adenocarcinoma after treating GERD. Two groups were selected, with 1 group choosing to undergo Anti-reflux Surgery while the second group chose the option of medical treatment of either H2 Blocker or PPI inhibitor, both groups had an established GERD before starting the study and were followed for 12 years. Both groups were compared with their correspondent population using standardized Incidence. Interval with 95% CI and Hazards Ratio for cofounders (Age, Sex, DM2, COPD, obesity and Lost to follow up) was evaluated. Results have shown that total patients developing Adenocarcinoma in medication group were 2368 compared to 177 in patients who chose the surgery option, with the incidence interval decreasing over the years.

Table 1. Showing total number of patients who developed Adenocarcinoma and the Incidence Ratio for each follow up period

	Medication Group	Anti Reflux Surgery Group
Total Cases of Adenocarcinoma	2368	177
SIR in 5-10 years Follow up	2.03	7.63
SIR in 10-15 years Follow Up	1.56	3.64

S1911

Data Driven Study to Identify the Association Between GERD and Obesity: In an Urban Gastroenterology Center

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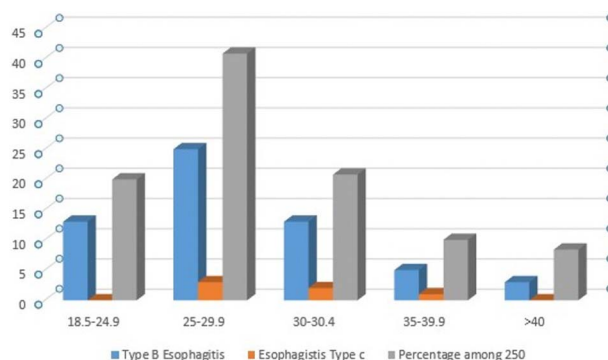
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Introduction: GERD is a well-established obesity-related complication. This article aims to address 3 research questions concerning the relationship between obesity and GERD using data from 250 patients. Firstly, we explore whether there is a correlation between patients' GERD symptoms and their Body Mass Index (BMI), age, and gender. Secondly, we examine whether the presence of GERD findings, such as esophagitis, is associated with BMI. Lastly, we investigate whether there is any correlation between male and female patient symptoms and endoscopic findings.

Methods: From January 2019 to September 2021, a cross-sectional population-based study of 250 patients with upper GI symptoms was planned. Patients over 18 years old were included, regardless of sexual orientation and ethnicity. Exclusion criteria included inflammatory bowel disease, previous *H. pylori* treatment, and co-morbidities. The study comprised 3 phases: data collection through chart reviews by medical students and visiting physicians, analysis of the collected data by senior physicians, and final analysis of the results using current statistical methods.

Results: Among 250 patients, it was evident that most of the population was overweight (40.8%) and obese (39.2%), with mean BMI is 29.99. From age 31-40 years (3.12 percent) to 51-60 years (12.28 percent), the number of patients in obesity class II (BMI 35-39.9) has increased fourfold. According to our data analysis, 53.6%, 69.2%, and 47.2% described symptoms like acid reflux, heartburn, and dyspepsia. In our study, more than 71.6% of our patients are diagnosed and treated for GERD, regardless of previous treatment response. Although endoscopic findings of esophagitis were significantly higher in overweight (43%) and obese (36%) patients compared to normal BMI (20%), people with male-female ratio was relatively high at 2.7:1, indicating that males have more endoscopic findings than females (Table 1, Figure 1).

Conclusion: The study results provide correlations between patients' GERD symptoms and their BMI, age, and gender, emphasizing the importance of these factors in clinical practice. Furthermore, it is acknowledged that BMI has limitations in accurately estimating adiposity, as indicated in the existing literature. Nonetheless, the study highlights the association between GERD findings and BMI. The observed gender-based differences in symptoms and endoscopic findings necessitate further research to explore underlying mechanisms and facilitate personalized approaches to GERD management.



[1911] **Figure 1.** Incidence of Esophagitis among different BMI and total population.

Table 1. Symptom analysis among male and female

Symptoms	Male	Female	Total
Acid reflux	48	86	134 (53.6%)
Heart Burn	66	107	173 (69.2%)
Dyspepsia	52	66	118 (47.2%)
Dysphagia	9	5	14 (5.6%)

S1912 Presidential Poster Award

Effects of Stomach Shortening on Weight Loss Following Endoscopic Sleeve Gastropasty

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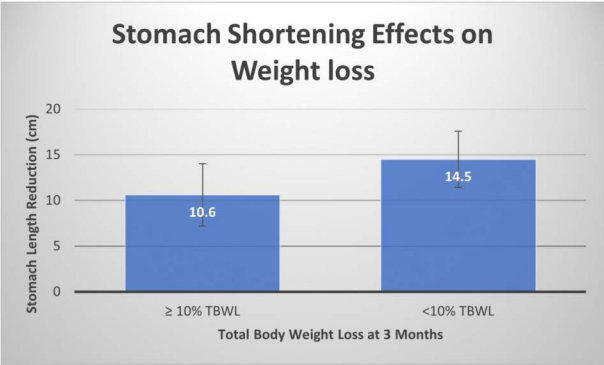
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Introduction: Endoscopic sleeve gastropasty (ESG) is a restrictive procedure that leads to significant total body weight loss (TBWL) by remodeling the stomach and reducing gastric volume. Although ESG is very effective, the rates of TBWL vary between patients. No prior data is available on the impact of stomach length reduction as a predictive factor for weight loss. Therefore, we aimed to evaluate if the shortening of the sleeve is correlated to weight loss in patients undergoing ESG.

Methods: This was a prospective study of adult patients undergoing endoscopic bariatric therapy between 06/2021 and 03/2023 for primary treatment of morbid obesity at an academic medical center. The length of the sleeve was measured before and after gastropasty. The initial length before gastropasty was adjusted for scope looping in the fundus using a 12% relative reduction of the gastroesophageal junction-to-pylorus distance. The primary outcome was the correlation between the length of sleeve reduction and the amount of weight lost.

Results: Twenty-four adult patients with obesity were included in the study. All patients tolerated ESG well, with no significant adverse events. Two patients underwent repeat ESG for weight regain at 1 year. Mean %TBWL at 3, 6, and 12 months were 21.6 ± 18.1 , 18.2 ± 16.9 , and 12.6 ± 18.7 , respectively (Table 1). Among the 24 included patients, sixteen completed 6 months, and 8 completed 12 months of follow-

up after ESG. No significant correlation was found between %TBWL or mean excessive weight loss and stomach length reduction at 3 (R = 0.11, P = 0.69), 6 (R = 0.38; P = 0.2), or 12 months (R = 0.33; P = 0.42). The average stomach length reduction was not significantly different between patients who had ≥10% TBWL vs. < 10% TBWL, Figure 1, (10.6 ± 6.8 vs. 14.5 ± 6.1 cm, respectively; P = 0.25). **Conclusion:** No significant correlation was found between stomach shortening and the percentage of weight loss following ESG in our cohort. These data suggest that the mechanism of action and efficacy of gastroplasty are unlikely dependent on sleeve length. Further study is needed to validate these findings.



[1912] **Figure 1.** Average stomach length resduction (cm) for patients with greater than 10% total body weight loss (TBWL) and patients with less than 10% TBWL.

Table 1. Main Patients Characteristics and Primary Outcomes			
Main Demographic and Clinical Characteristics			
			N = 24
Age, years			46 ± 12.2
Gender, Female n(%)			18 (75)
BMI at baseline (lbs/feet ² ± SD)			39.6 ± 7.5
TBWL (mean ± SD)			
3 months			21.6 ± 18.1
6 months			18.2 ± 16.9
12 months			12.6 ± 18.7
BMI loss (lbs/feet ² ± SD)			
3 months			5.6 ± 9.3
6 months			2.9 ± 2.8
12 months			1.9 ± 3.3
Total patients on follow up, to date (n)			24
3 month follow up			16
6 month follow up			13
12 month follow up			8
Outcomes Per Weight Loss Groups			
Weight loss groups (n)	TBWL≥ 10% N = 8	TBWL< 10% N = 8	P value
Age (avg ± SD)	48.4 ± 14.3	45.8 ± 13.3	0.4
Gender, n (%)			0.2
Female	5 (62.5)	7 (87.5)	
Male	3 (37.5)	1 (12.5)	
Race, n (%)			0.9
White	7 (87.5)	6 (75)	
American Indian	0	1 (12.5)	
Unknown	1 (12.5)	1 (12.5)	
BMI Baseline (mean ± SD)	41.4 ± 5.9	38.3 ± 5.9	0.27
Sutures (n ± SD)	8.4 ± 2.7	8.5 ± 3.4	0.1
Effects of Stomach Shortening on Weight Loss			
Stomach Length Before ESG, mean (cm ± SD)	30.3 ± 6.5	29.7 ± 6.8	0.16
Stomach LengthAfter ESG*, mean (cm ± SD)	19.6 ± 4.8	15.2 ± 3.3	0.05
Stomach Length Reduction, mean (cm ± SD)	10.6 ± 6.8	14.5 ± 6.1	0.25

ESG, endoscopic sleeve gastroplasty; TBWL, total body weight loss; SD, standard deviation * Adjusted for scope looping in the fundus.