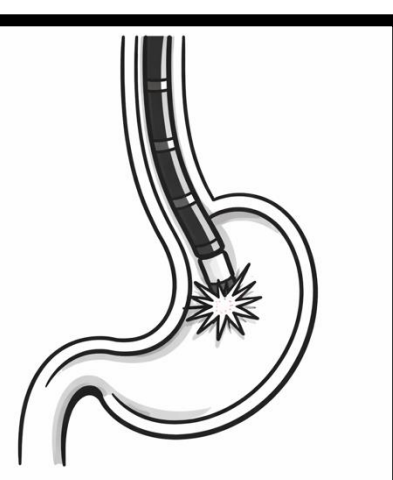


PREOPERATIVE SYMPTOM DURATION AND COMORBIDITY INDEX ASSOCIATED WITH LONG-TERM PPI USE AFTER PERORAL ENDOSCOPIC MYOTOMY

Emily F Simon, MD; Natalie N Chakraborty, MD; Ayesha Siddiq, MD; Maham Babur, MD; Kayvan Barekatain, MD; Jeffrey Marks, MD; Samuel Zolin, MD; Christina S Boutros, DO; Hamza Nasir Chatha, MD; Jamie Benson, MD; Patrick Wieland, MD; Saher-Zahra Khan, MD; Nicolette Winder, MD; Joshua Lyons, MD

BACKGROUND



Peroral endoscopic myotomy (POEM) is an established treatment for **achalasia**.



Postoperative reflux is common → many patients require **long term proton pump inhibitors (PPIs)**



It is not well-established what **factors** will lead patients to **require chronic PPI use**.



AIM: Evaluate **factors associated with chronic PPI use** after **POEM** and compare **symptom quality of life in users versus non-users**.

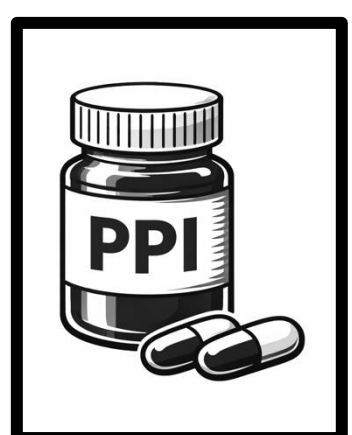
METHODS



INCLUSION:

- POEM patients
- Surgery 2011-2024

PATIENT GROUPS:



Chronic
PPI User

Taking PPIs ≥ 6 months
after surgery

Non-PPI
User

Not taking PPIs ≥ 6
months after surgery

DATA SOURCE

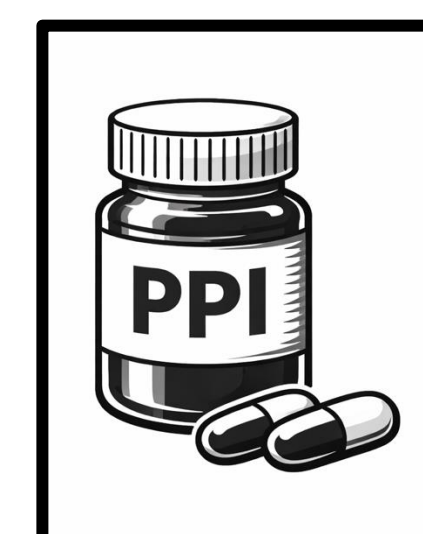
- Retrospective chart review: surgical outcomes, preoperative details
- Prospective survey: Eckardt score, GERD-HRQL, PPI use, need for repeat endoscopy

STATISTICAL ANALYSIS:

- Univariable: Chi-Square, Kruskal-Wallis
- Multivariable Logistic Regression

RESULTS

PATIENT GROUPS:



Chronic PPI User

N=60 (71.4%)

Non-PPI User

N=24 (28.6%)

MULTIVARIABLE LOGISTIC REGRESSION MODELS:

- **Model:** factors association with **chronic PPI use**

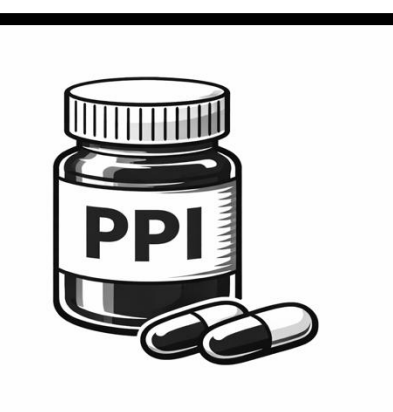
Associated with Chronic PPI Use	Not Associated with Chronic PPI Use
• Symptom duration > 4 years (OR 8.1; CI 1.3–52.2) • Charlson Comorbidity Index ≥ 3 (OR 9.5; CI 1.4–66.7)	• Preoperative PPI use • Preoperative Eckardt score • BMI

UNIVARIABLE ANALYSIS:

	Chronic PPI Users	Non-Users	p-value
Preoperative			
Age	61.1 (44.4-70.0)	44.7 (37.7-61.8)	0.04
Body Mass Index	30.5 (26.9-35.7)	23.5 (22-32.6)	0.01
Charlson Comorbidity Index	2.0 (0-4)	0.5 (0-2)	0.01
Proton Pump Inhibitor Use	40 (67%)	9 (38%)	0.01
Symptom Duration >4 years	23 (38%)	3 (13%)	0.02
Eckardt Score ≤3	10 (17%)	5 (21%)	0.52
Prior Intervention	32 (53%)	11 (46%)	0.64
Postoperative			
Median Follow Up (years)	6 (3-9)	5 (3-8.5)	0.88
Eckardt Score ≤3	37 (62%)	16 (67%)	0.23
GERD-HRQL <10	26 (43%)	11 (46%)	0.23
Any Symptom Recurrence at 6 months	31 (52%)	11 (46%)	0.46
Postoperative EGD	50 (83%)	15 (63%)	0.04
Postoperative Bravo	28 (47%)	8 (33%)	0.26
Need for Re-intervention	19 (32%)	7 (29%)	0.82

Data are presented as median (IQR) for continuous measures, and n (%) for categorical measures.

CONCLUSIONS



Over **70%** of patients who underwent POEM **required PPIs beyond 6 months**.



Eckardt Score and **GERD-HRQL** were **comparable** in chronic PPIs users versus non-users.



Prolonged preoperative achalasia symptoms + higher comorbidity were associated with **chronic PPI use**.