

PREVALENCE OF REFLUX SYMPTOMS DIMINISHES OVER TIME WITH ACID SUPPRESSION AFTER TAILORED POEM FOR ACHALASIA SPECTRUM DISORDERS

D. PAREKH¹, B. ROGERS², C.P. GYAWALI³
¹Mumbai Institute of Gastroenterology, Mumbai, India
²University of Louisville School of Medicine, Louisville, USA
³Washington University School of Medicine, Saint Louis, USA

PURPOSE / OBJECTIVES

- Gastroesophageal reflux is reported to be frequent following per oral endoscopic myotomy (POEM) for achalasia spectrum disorders.
- Tailored myotomy during POEM and consistent acid suppression may reduce reflux risk.
- We evaluated reflux symptoms over time in a cohort of achalasia patients treated with POEM and acid suppression.

MATERIAL & METHODS

- Inclusion criteria:** Consecutive patients presenting with achalasia, treated with POEM, and with consistent follow-up.
- POEM was performed by two operators using standard methodology.
- Achalasia symptoms were quantified using Eckardt score before and after POEM. Reflux symptoms of heartburn and/or regurgitation were documented when present.
- Patients were treated with rabeprazole 20 mg twice a day for 3 months, followed by once a day for another 3 months; further treatment depended on symptoms.
- Patients returned to the office for symptom assessment consistently at 1, 3, 6 and 12 months after POEM.

RESULTS

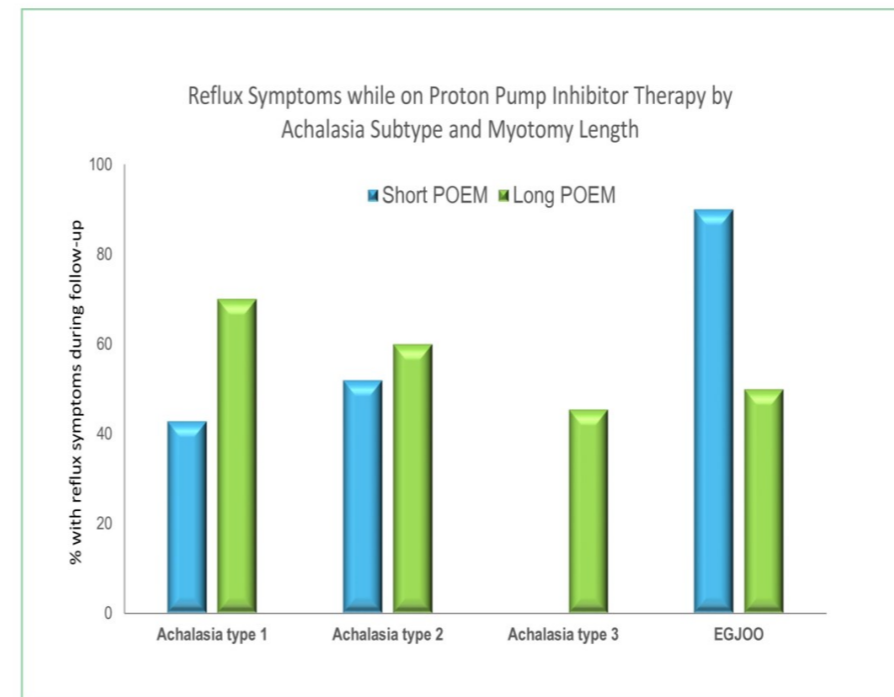
- Sample size:** 103 patients.
- Median pre-treatment Eckardt score was 7.0.
- 68% patients undergoing LES disruption alone, while the rest 32% underwent both esophageal body and LES disruption.
- Post-POEM median Eckardt score improved from pre-treatment values, collectively and individually in each achalasia cohort.
- Reflux rate:** 55 (53.4%) at one month; 22 (21.4%) at three months; 7 (6.8%) at six months; 4 (3.9%) at 12 months.
- Reflux symptoms were numerically more prevalent after long POEM in type 1 and type 2 achalasia (p=ns), and in EGJOO compared to other achalasia subtypes (p=0.03, **Figure**)
- Patients with EGJOO were more likely to experience reflux symptoms at some point (83.3%) compared to achalasia patients (50.5%, p=0.032).
- There was no difference in frequency of reflux symptoms at 3, 6, or 12 months by POEM type (p≥0.196).

Table 1 Patient and procedure parameters for each achalasia subtype/EGJOO

	Achalasia type 1 n=45 (43.7%)	Achalasia type 2 n=35 (34.0%)	Achalasia type 3 n=11 (10.7%)	EGJOO n=12 (11.7%)	P value
Age	41.0 (36.0-50.5)	43.0 (34.0-52.0)	47.0 (34.0-67.0)	42.5 (35.3-53.4)	0.659
Gender (F)	21 (46.7%)	19 (54.3%)	7 (63.6%)	2 (16.7%)	0.094
Pre POEM Eckardt score	7.0 (6.0-7.0)	7.0 (6.0-8.0)	6.0 (6.0-8.0)	6.0 (6.0-7.0)	0.575
Pre- POEM IRP (mmHg)	26.5 (23.2-31.5)	27.6 (21.2-30.1)	28.3 (20.3-32.3)	15.7 (14.7-16.3)	<0.001
Short POEM	35 (77.8%)	25 (71.4%)	0 (0.0%)	10 (83.3%)	<0.001
Long POEM	10 (22.0%)	10 (28.6%)	11 (100.0%)	2 (16.7%)	<0.001
POEM length (cm)	4.0 (4.0-5.0)	5.0 (4.0-6.0)	10.0 (9.0-10.0)	4.0 (4.0 -5.0)	<0.001

Table 2 Post POEM symptom details for each achalasia subtype/EGJOO

	Achalasia type 1 n=45 (43.7%)	Achalasia type 2 n=35 (34.0%)	Achalasia type 3 n=11 (10.7%)	EGJOO n=12 (11.7%)	P value
Post POEM Eckardt score	1.0 (1.0-1.0)	1.0 (1.0-1.0)	1.0 (1.0-1.0)	1.0 (1.0-1.0)	0.576
Proportion with reflux symptoms at any point	22 (48.9%)	19 (54.3%)	5 (45.5%)	10 (83.3%)	0.175
Reflux symptoms after short POEM	15/35 (42.9%)	13/25 (52.0%)	--	9/10 (90.0%)	0.031
Reflux symptoms after long POEM	7/10 (70.0%)	6/10 (60.0%)	5/11 (45.5%)	1/2 (50.0%)	0.714



SUMMARY / CONCLUSION

- Reflux symptoms are not universally present after POEM.**
- They are most prevalent early following successful POEM, and decline over time with acid suppression.**
- Caution is advised when managing EGJOO with POEM, because of higher prevalence of reflux symptoms despite acid suppression.**