

Wrapping it up long and secure! Long-Term Composite Gastroesophageal Reflux Related Outcomes Of Per Oral Endoscopic Myotomy With Concomitant Endoscopic Fundoplication (POEM+F) for Achalasia Cardia – 5-Year Follow-Up of a large single-center database

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BACKGROUND & AIMS

- Gastro-esophageal reflux (GER) - significant concern after POEM with impact on post-POEM quality of life (QOL)
- Concomitant same session endoscopic fundoplication (POEM+F) -promising results in short and medium-term studies.
- This study reports long-term outcomes of POEM+F.

MATERIAL & METHODS

Study type- Retrospective analysis of prospectively maintained database

Study population - patients undergoing POEM+F.

Study duration – 2019 to 2024

Demographics, pre-POEM Eckardt score (ES), procedure details and adverse events (AEs) recorded.

Outcomes –
Follow-up (F/u) evaluation at 1m, 6m and then annually

Subjective assessment – post-POEM ES, GerdQ score

Objective assessment – EGD – wrap integrity, esophagitis LA grade, and pH studies (esophageal acid exposure time [EAET]). GER - Lyon Consensus 2.0.

RESULTS

N= 97 (4 excluded – 2 – technical failures; 2 – etiology non AC motility disorders. Data of **93 patients was analysed**

Mean age [SD] – 45.5y [14.3]; 47 females

Significant dysphagia improvement seen in all –

Mean pre- POEM ES 7.92 [1.48] & 1m post-POEM ES [SD] - 0.55 [0.67] - (P < 0.001)

Sustained for 5y – 1.19 [1.97] in all (P < 0.001)

Mean total procedure time (min) [SD] – 97.66 [32.59]

Mean fundoplication time (min) [SD] - 41.27 [16.11]

RESULTS

Table 1: Subjective outcomes at follow-up after POEM+F

Outcomes	Follow - up						
	1 month N = 92	1 Year N = 58	P-value	3 Year N = 32	P-value	5 Year N = 16	P-value
Subjective (Mean, SD)							
ES	0.54 [0.65]	0.83 [1.18]	< 0.001	0.67 [0.92]	< 0.001	1.19 [1.97]	< 0.001
GERDQ (>8)	2	7 (3/7) – H. Pylori +, responded with Rx)		2		2	
PPI usage	NR	2		2		3	

Table 2: Objective outcomes at follow-up after POEM+F

Outcomes	1-m		1-y		P-value	3-y		P-value
	N = 89	%	N=16	%		N = 19	%	
Wrap Integrity	84	94	15	93	1.0	15	78.9	0.07
Erosive Esophagitis	C/D	1	0	0		0	0	
	A/B	7	7.8	2	12.5		5	26.3

RESULTS – FOLLOW-UP

Minor AE – intra and post procedure – **10/89 (10.75%)**
5 pts– mucosal injury – endoclips ;
1 pt– subcut emphysema – spontaneous resolution,
4 pts – chest pain – pain medications.

1m f/u –

- intact wrap – 85/89 (95.5%).
- GER (abnormal EAET) – 12/84 (14.2%); ; GerdQ >8 – 2.
- loose wrap with Gr C esophagitis – 1 –improved to LA Gr A at 2 yr f/u & no PPI use.

Asymptomatic Gr. A/B esophagitis, normal EAET – 7/89 (7.8%)

Median f/u (m) – 32.6 [IQR 15-48.5], max f/u 68m

Outcomes sustained throughout - no significant deterioration in GER related outcomes demonstrated during 1, 3 and 5y f/u.

Wrap integrity and EAET<6% at 1m, 1y and 3y f/u - **sustained response** (P>0.05, NS).

GerdQ scores < 8 - throughout study period - **(88%)**

Minimal patients required regular PPI.

No patient reported new onset GER during f/u.

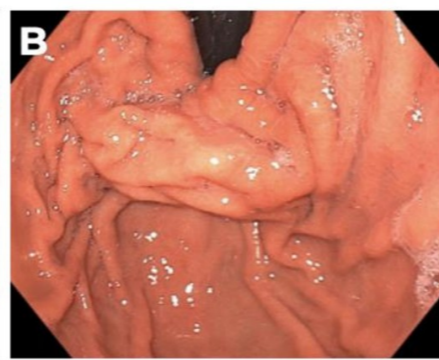
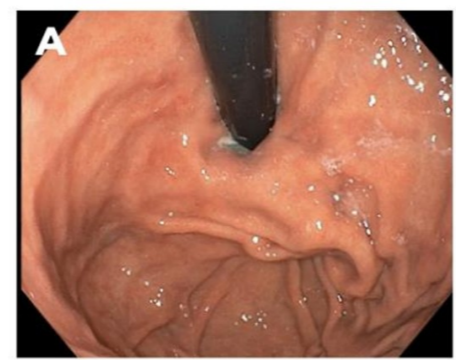
CONCLUSION

Sustained superior subjective and objective outcomes at up to 5y f/u

No deterioration of long-term clinical response.

POEM+F can be an option for AC patients who require POEM but are high risk for post-POEM GER or have concerns regarding post-POEM GER.

Further randomized studies are required to confirm these observations.



Wrap at 1 yr

Wrap at 3 yrs