

Efficacy and Patient Satisfaction of Single-Session Intraoperative Transoral Incisionless Fundoplication and Laparoscopic Hernia Repair

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Disclosures

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GERD

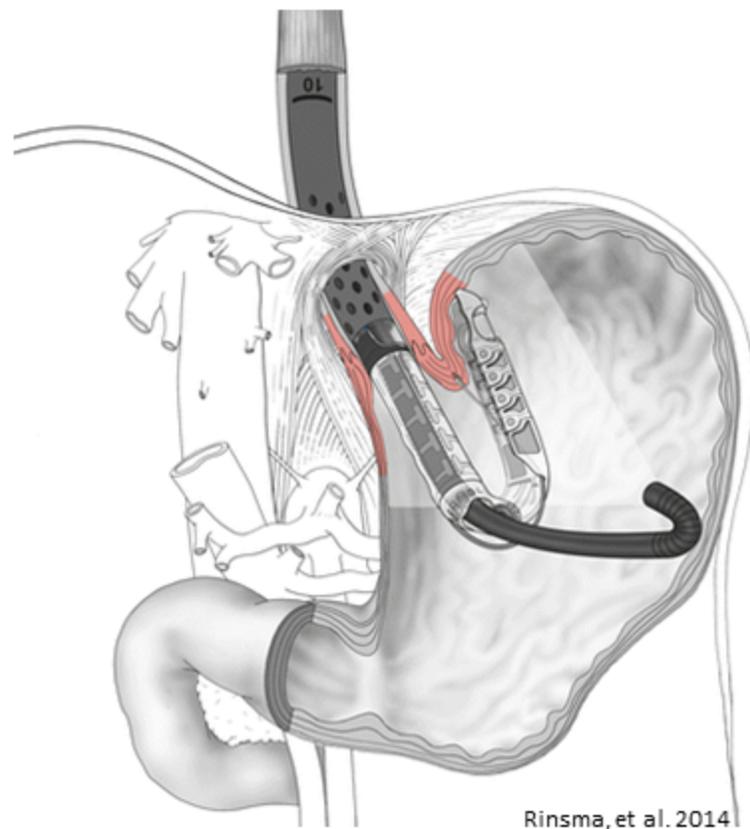
- 20-30% of Americans suffer from frequent GERD symptoms¹.
- 30% of patients have symptoms refractory to PPIs^{1,2}.



Photo from <https://tvnews.tv/can-you-have-a-heart-attack-and-not-know/>

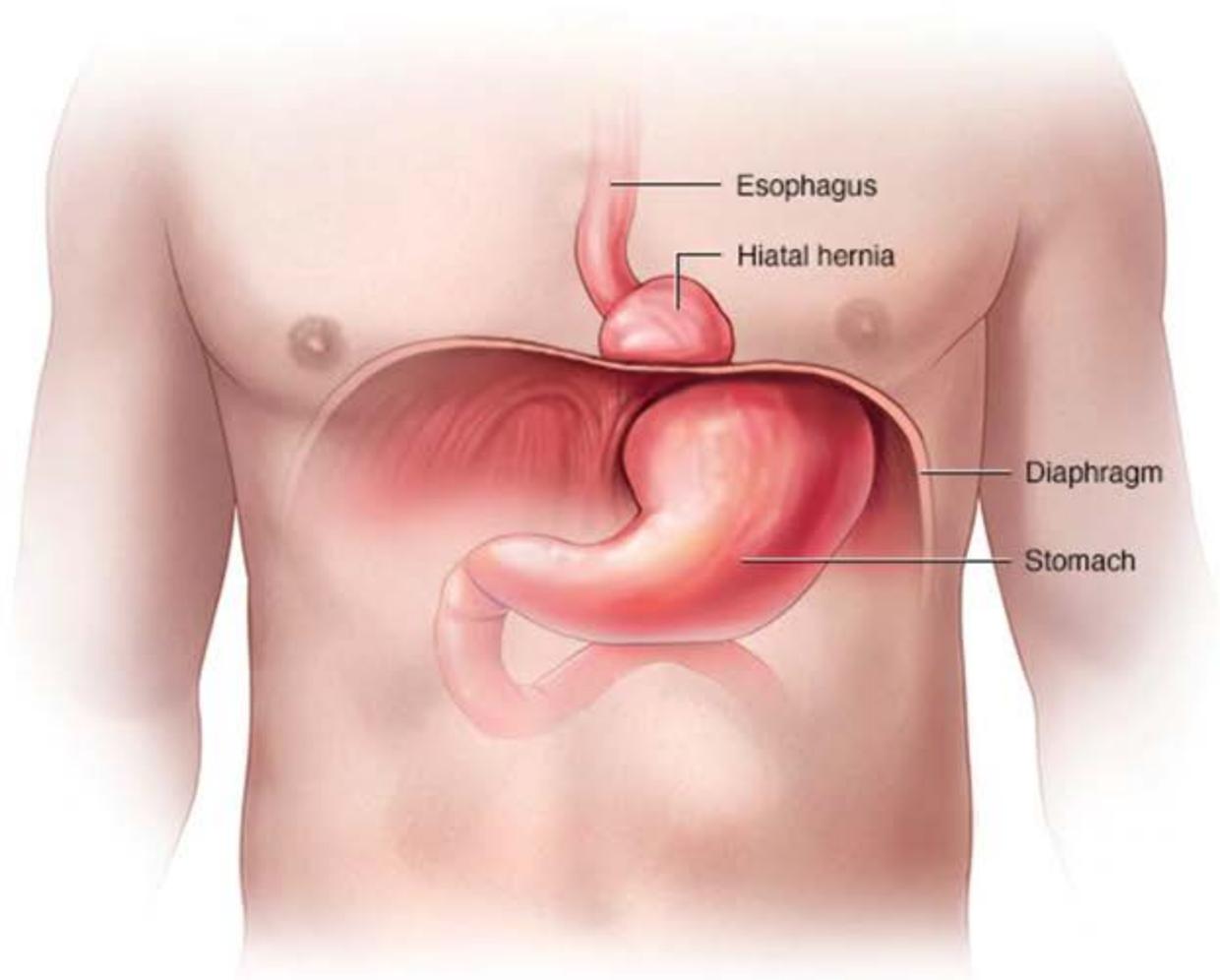
Transoral Incisionless Fundoplication

- Endoscopic, minimally invasive.
- Reduces hiatal hernias <2 cm.
- Fundus is wrapped 270 degrees.
- Creates new 2-3 cm valve at GE junction.
- No gas bloat or dysphagia.



TIF

- TEMPO and TEMPO 2 Trials show that TIF relieved severe GERD symptoms better than PPIs^{5,6}.
- However, ~31% of patients with severe GERD have **hiatal hernias >2 cm and do not qualify for TIF alone.**
(RESPECT Trial; Gastroenterology 2015; 148:324-333).



TIF Hybrid: same-session hiatal hernia repair and TIF



- Convenient and efficient
- Apply benefits of TIF to broader population that was previously disqualified from the procedure



“Intact hiatal repair with intact transoral incisionless fundoplication lead to normalization of pH scores in 21 of 22 patients (95%)”. Ihde et al. 2019

Aim

- Test whether combined laparoscopic hernia repair with same-session TIF is a safe and effective treatment for patients with refractory GERD who have large hiatal hernias (>2 cm).



Patient Population

33 patients underwent TIF hybrid procedure between June 2015- June 2018.

Average age = 66.

55% female.

Average DeMeester Score was 36 (range 11-71).

All patients had GERD symptoms that were refractory to daily maximum PPI treatment.

Pre-Procedure



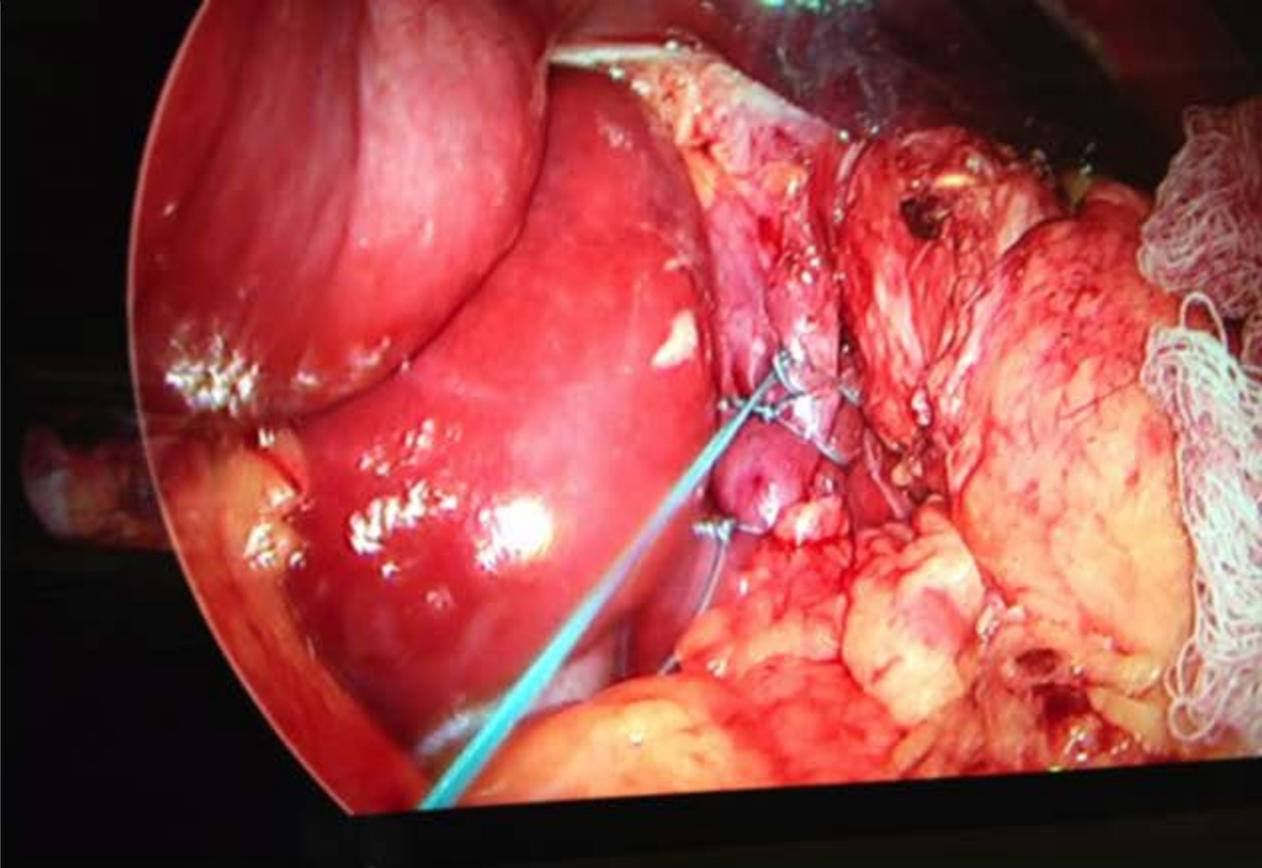
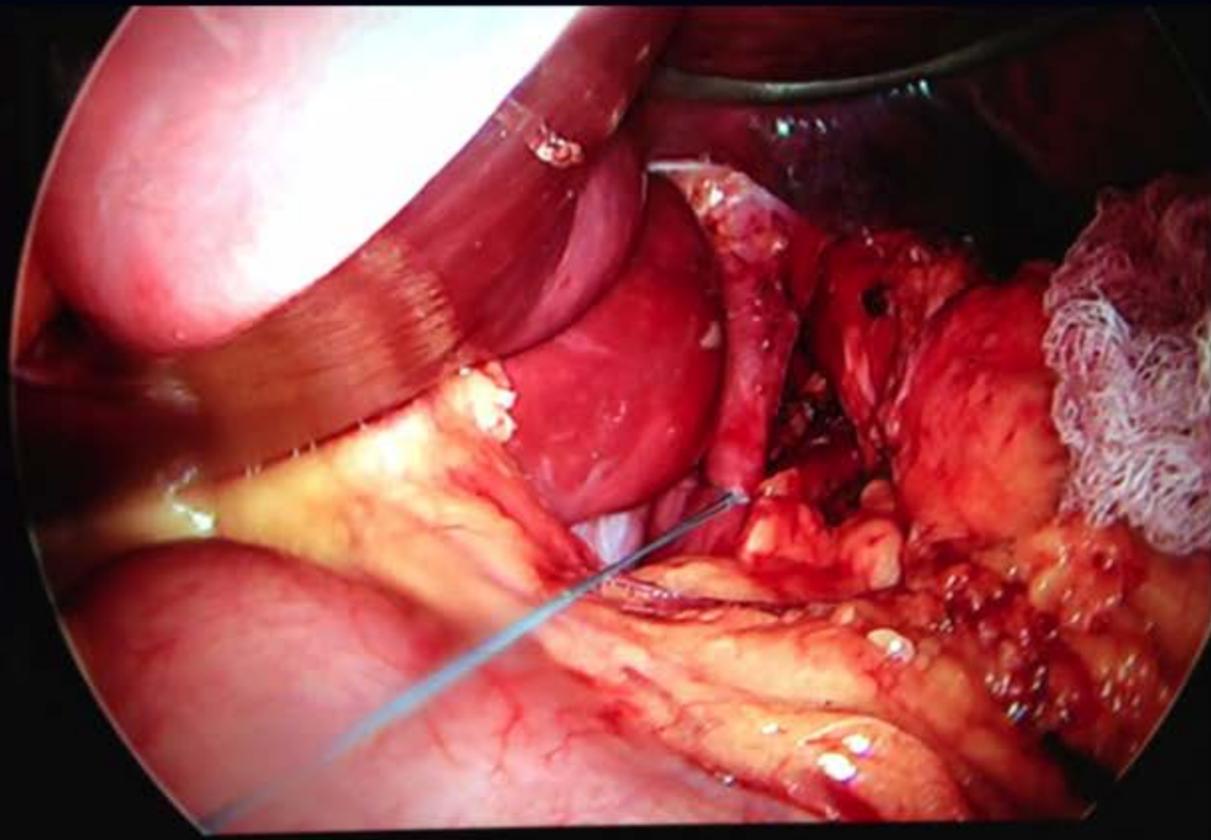
Patients were surveyed regarding presence of regurgitation, heartburn, hoarseness, cough, and PPI use.



24-hour pH studies confirming GERD using De-Meester scoring system (scores >14.72 diagnostic of reflux disease)

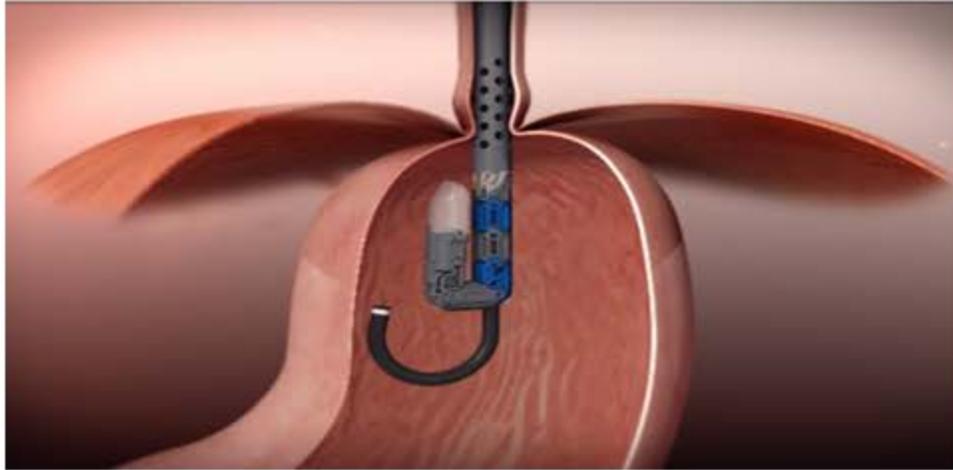


Each patient underwent esophageal manometry to confirm normal esophageal motility.

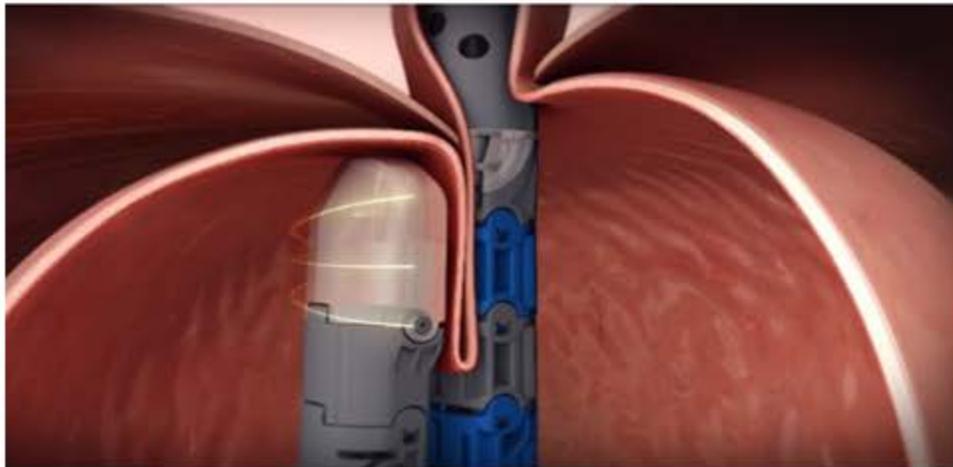


Laparoscopic Hiatal Hernia Repair

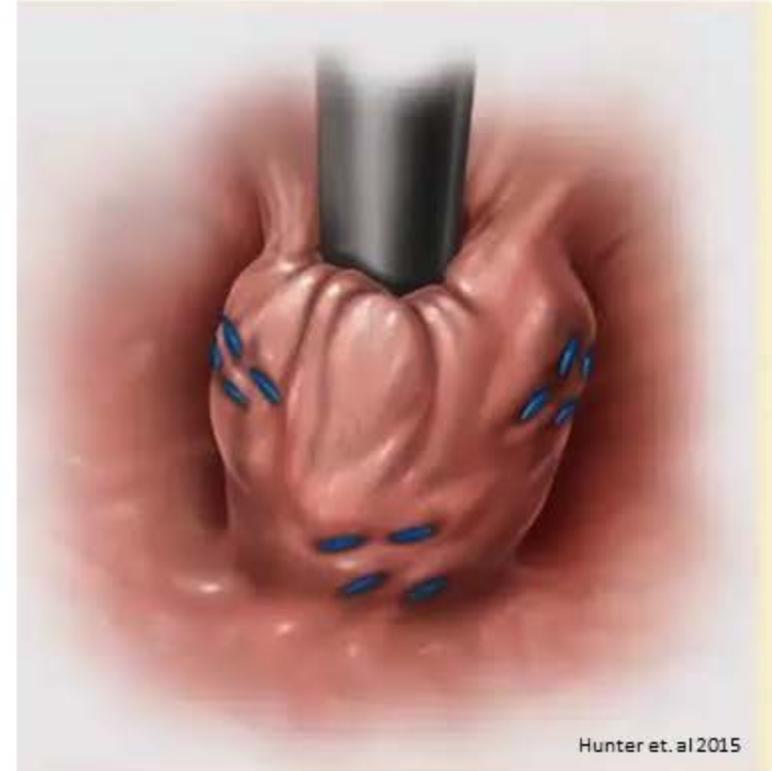
TIF Overview



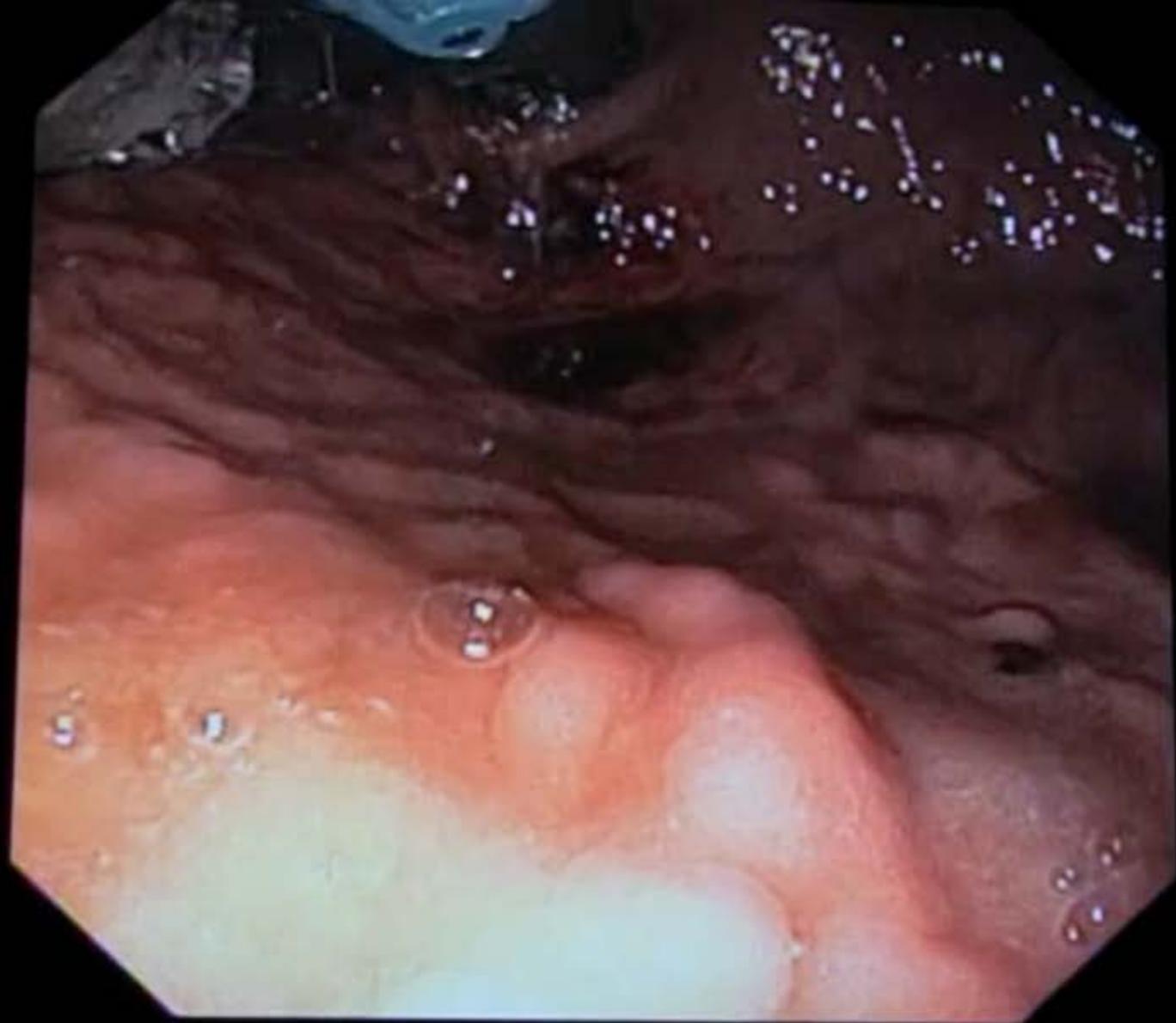
<https://www.mayoclinic.org/medical-professionals/digestive-diseases/news/transoral-endoscopic-incisionless-fundoplication/mqc-20454990>

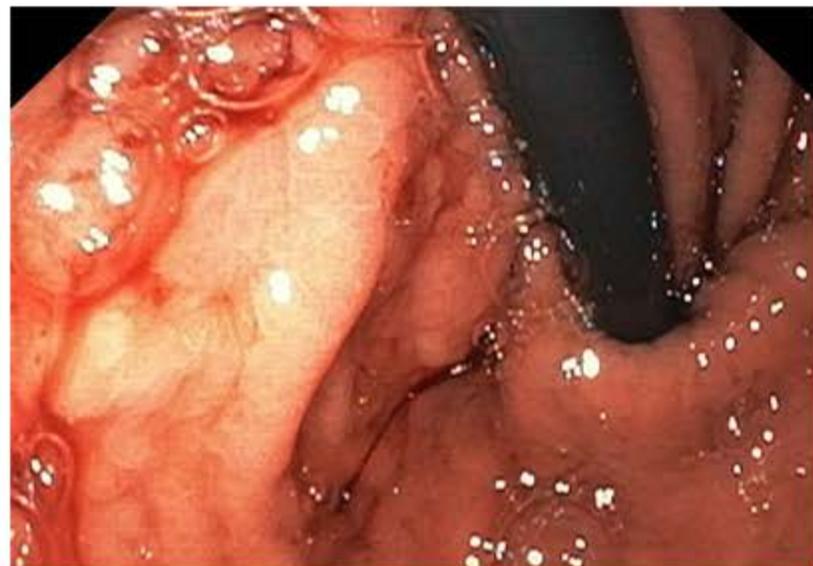


<http://www.bariatricnews.net/?q=news/112695/csr-endoluminal-gerd-treatments-esophyx>



New valve: 270 degree wrap



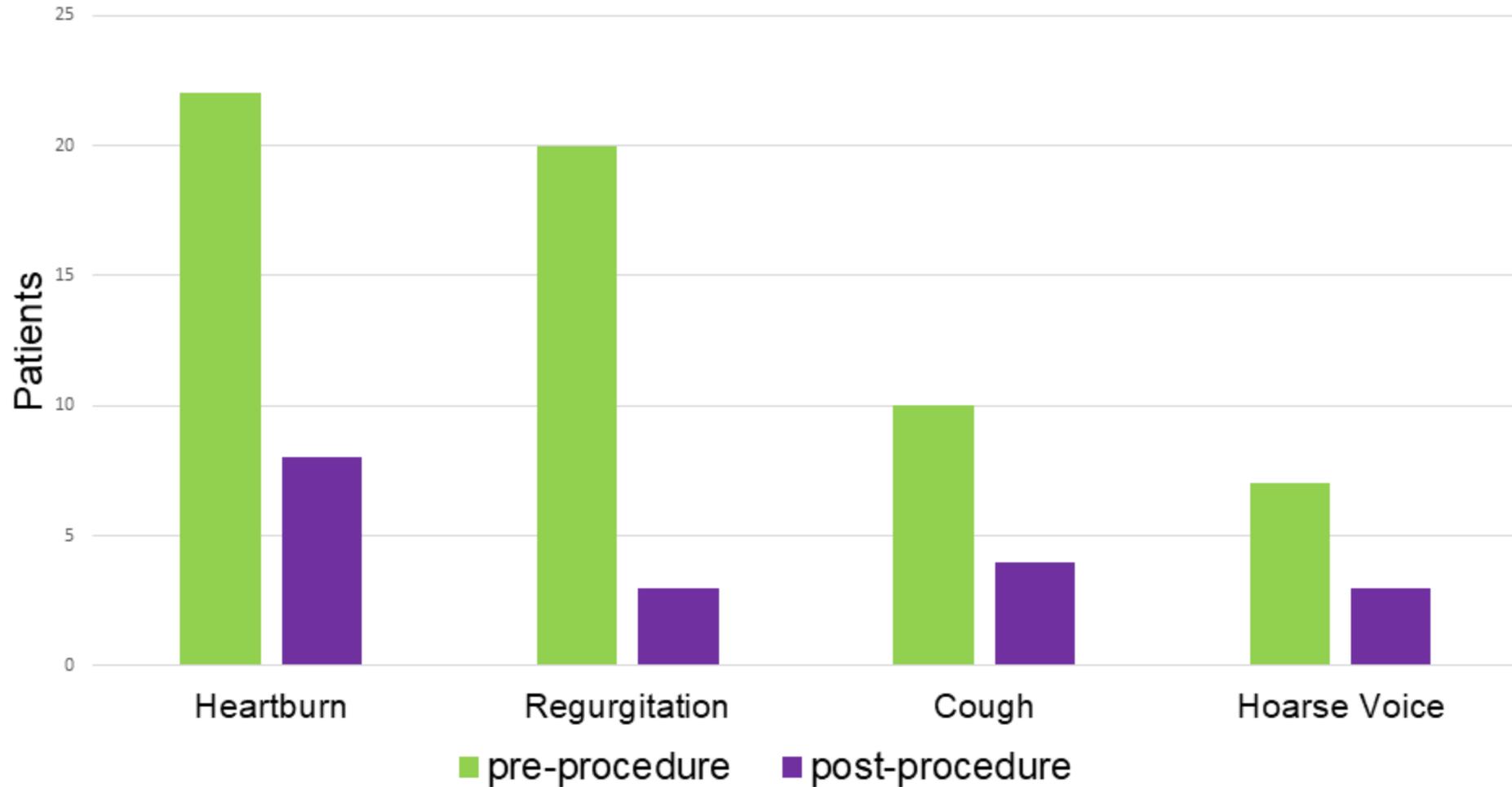


Transoral
Incisionless
Fundoplication

Post-procedure Follow Up

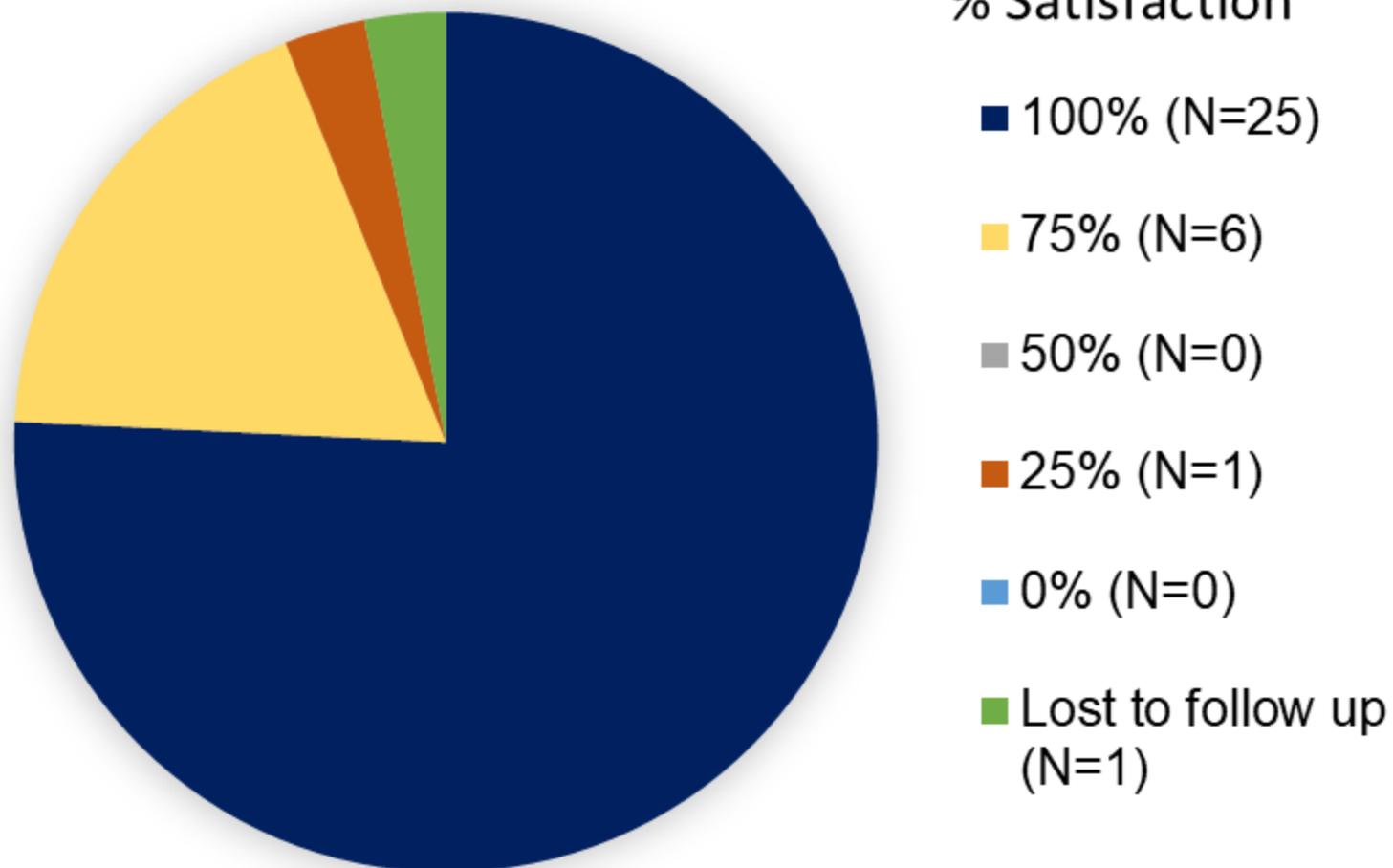
- Median post-procedure follow-up was 9 months (1-29 months)
- Patients surveyed regarding GERD symptoms post procedure.
- GERD-HRQL, RSI scores, and GERSS scores were collected retrospectively.
- There were no post-procedure complications.

GERD Symptoms Pre- and Post- Procedure

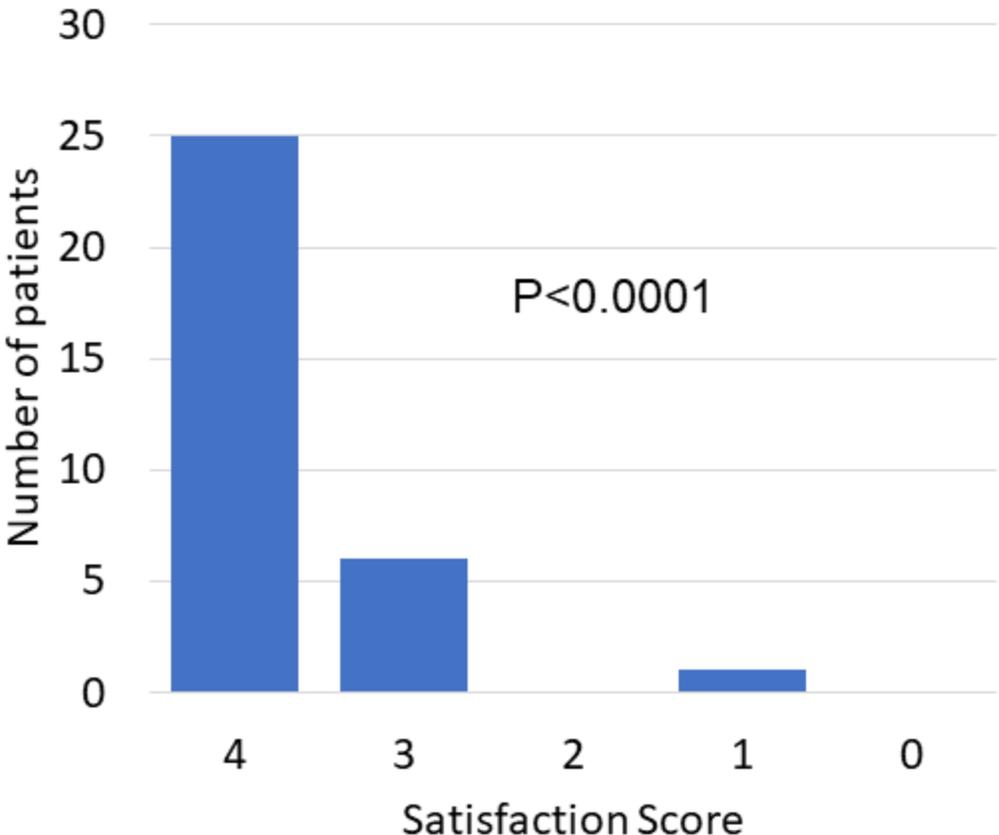


81% (27/33) of patients were off daily PPIs.

Patient Satisfaction Post-Procedure



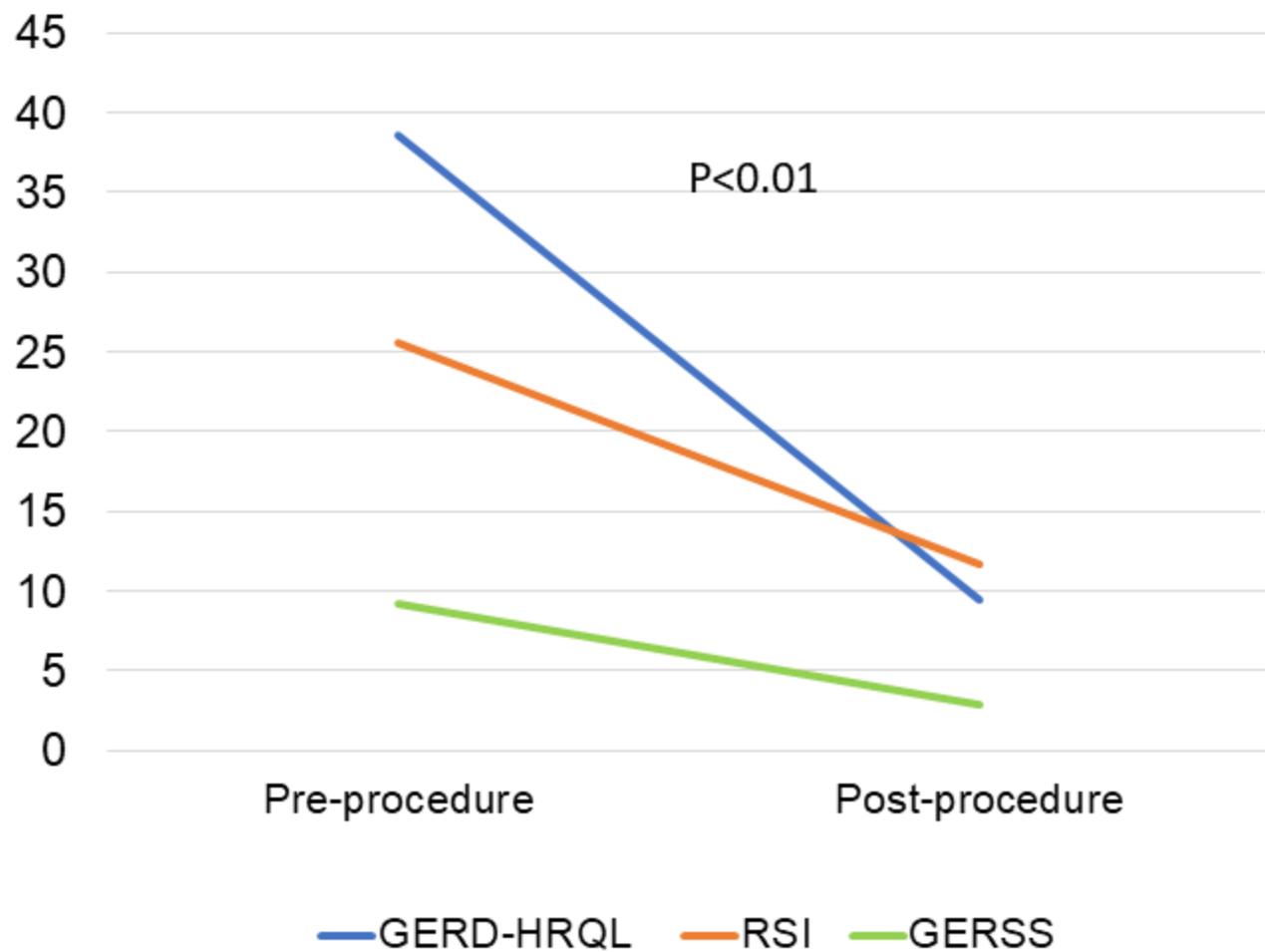
Patient Satisfaction Scores Post-Procedure



% Satisfaction	Satisfaction Score
100	4
75	3
50	2
25	1
0	0

Statistical analysis was done using the Wilcoxon rank test.

Quality of Life Survey Scores Before and After TIF Hybrid



	Pre-procedure	Post-procedure
GERD-HRQL	38.6 +/- 7.2	9.46 +/- 3.6
RSI	25.6 +/- 4.4	11.7 +/- 3.7
GERSS	9.23 +/- 1.3	2.84 +/- 1.2

Statistical analysis was performed using the Wilcoxon rank test.

Conclusion

TIF hybrid significantly reduced PPI use and GERD symptoms.

TIF hybrid is a safe and efficacious strategy to treat refractory GERD in patients with hernias >2 cm.

More data is needed to determine long term durability of the TIF hybrid procedure.

Sources

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Limitations

- pH monitoring was not repeated post-procedure to confirm adequate treatment of acid reflux due to patient preference.
- Collecting GERD-HRQL, RSI, and GERSS data retrospectively subjects the data to recall bias.