

## LVHN Reflux Treatment Program: A Pilot Study Evaluating the value of two novel procedural techniques in treating GERD vs standard medical therapy. A multidisciplinary approach

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# LVHN Reflux Treatment Program: A Pilot Study

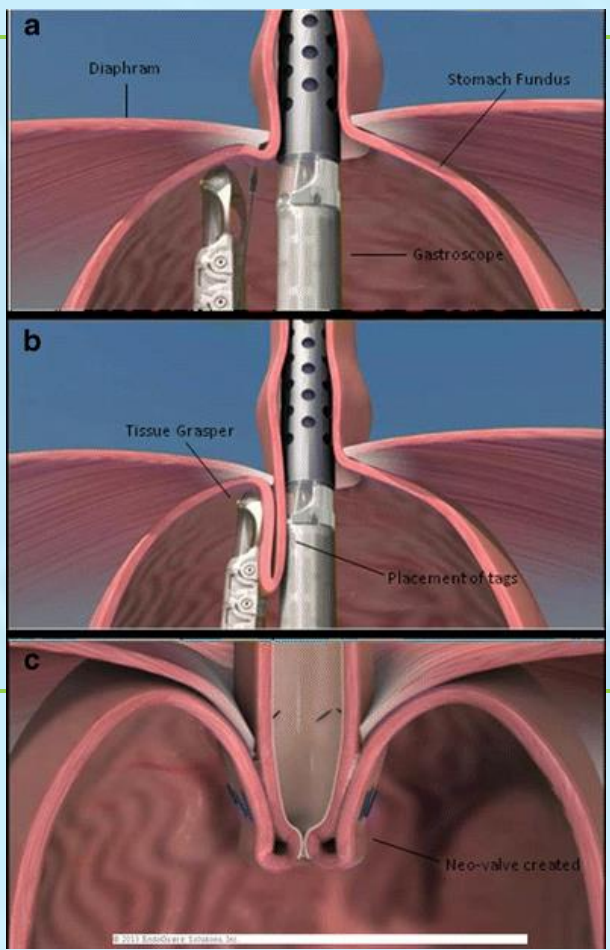
## Evaluating the value of two novel procedural techniques in treating GERD vs standard medical therapy. A multidisciplinary approach

Karim Hussein, MSIV under the mentorship of Dr. Scott Beman, MD

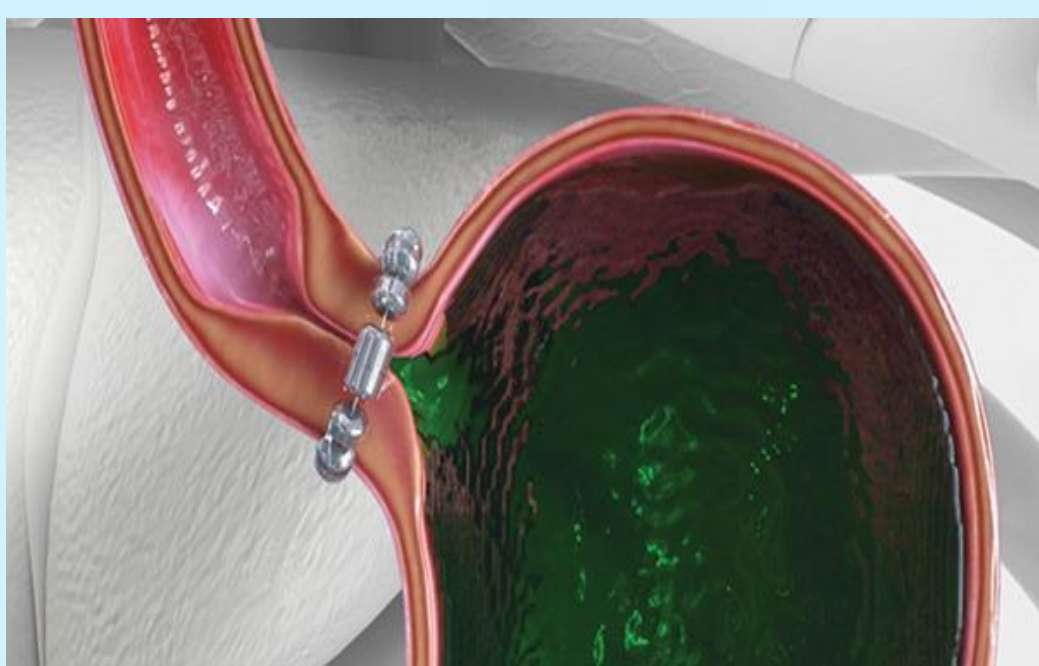
Lehigh Valley Health Network, Allentown, Pennsylvania

### Background

- Normal swallowing involves passage of food from mouth through esophagus to stomach
- GERD is symptomatic regurgitation from stomach to esophagus
- Prevalence of 19.8% in the US<sup>1</sup>
- Treatment w/ PPI is mainstay of medical therapy
- Nissen Fundoplication is the “gold standard” for surgical intervention
- **Transoral Incisionless Fundoplication**
- Utilizes Esophyx device to suture fundus of stomach to distal esophagus
- FDA approved in 2009
- Meta-analysis demonstrated a cessation of PPI use in 89% of patients in 5 year follow-up<sup>2</sup>



- **LINX magnetic core band**
- Titanium beads wrapped around the LES
- FDA Approved in 2012
- Significant reduction in PPI use and increased QoL at 5-year follow-up<sup>3</sup>

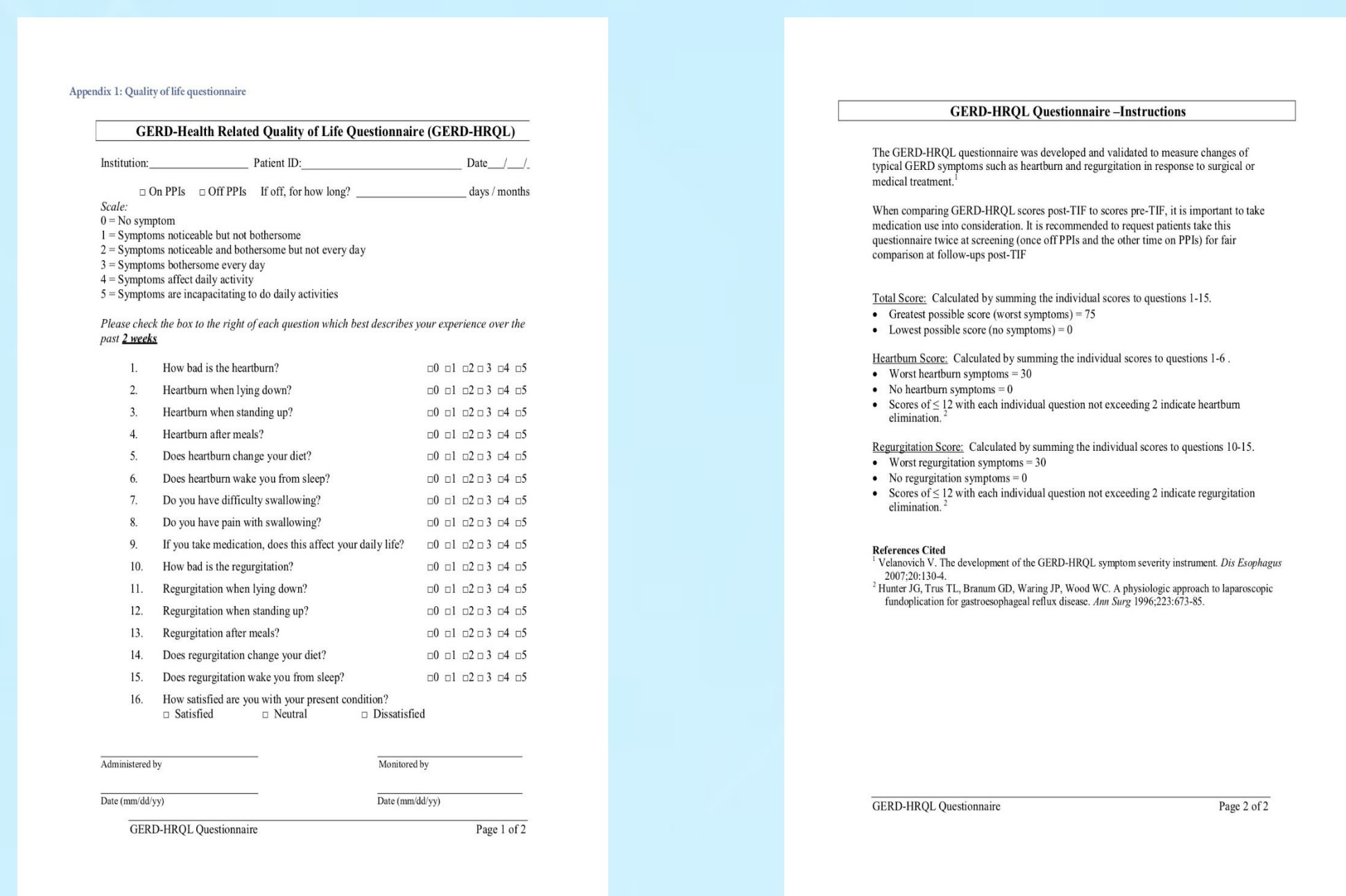


### Problem Statement

Pilot project assessing the TIF and LINX procedures' effect on patient QoL at 6-month follow-up using the GERD-HRQL

### Methods

- Prospective study of participants > 18yo w/ GERD and PPI use > 1 month
- Symptoms occurring  $\geq$  2-3 days/week w/ no to minimal improvement on PPI
- No hx of Barrett's esophagus, esophageal stricture, systemic sclerosis, esophageal adenocarcinoma
- Patients undergo PPI trial, EGD, pH monitoring, and esophageal manometry
- Patients' QoL is assessed via GERD-HRQL
- Undergo either TIF or LINX after discussion with care team
- Stop PPI use 2 weeks post-op
- Reassess w/ GERD-HRQL at 6-month follow-up



GERD-HRQL<sup>4</sup>

### Results

	Procedure	GERD-HRQL initial total score	GERD-HRQL total score 6-month follow-up
Patient 1	TIF	24	0
Patient 2	TIF	32	0
Patient 3	LINX	30	0
<b>Average</b>		<b>28.67</b>	<b>0</b>

### Discussion

- Patient GERD-HRQL average score at initial encounter of ~29
- Decreased significantly to 0 at 6-month follow-up
- Limited patient pool but positive results in patient symptoms without PPI use at 6 months
- Can reduce patient medication burden and increase QoL
- Values Based Patient Centered Care
- Multidisciplinary team approach to care

### Conclusions

- Gastroesophageal reflux is a widely prevalent disease
- Long-term PPI use has adverse effects on patient
- TIF and LINX procedures provide
  - Improved GERD related QoL
  - Decreased medication burden on patient

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