

Quality of life after Foregut Surgery

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OBJECTIVES

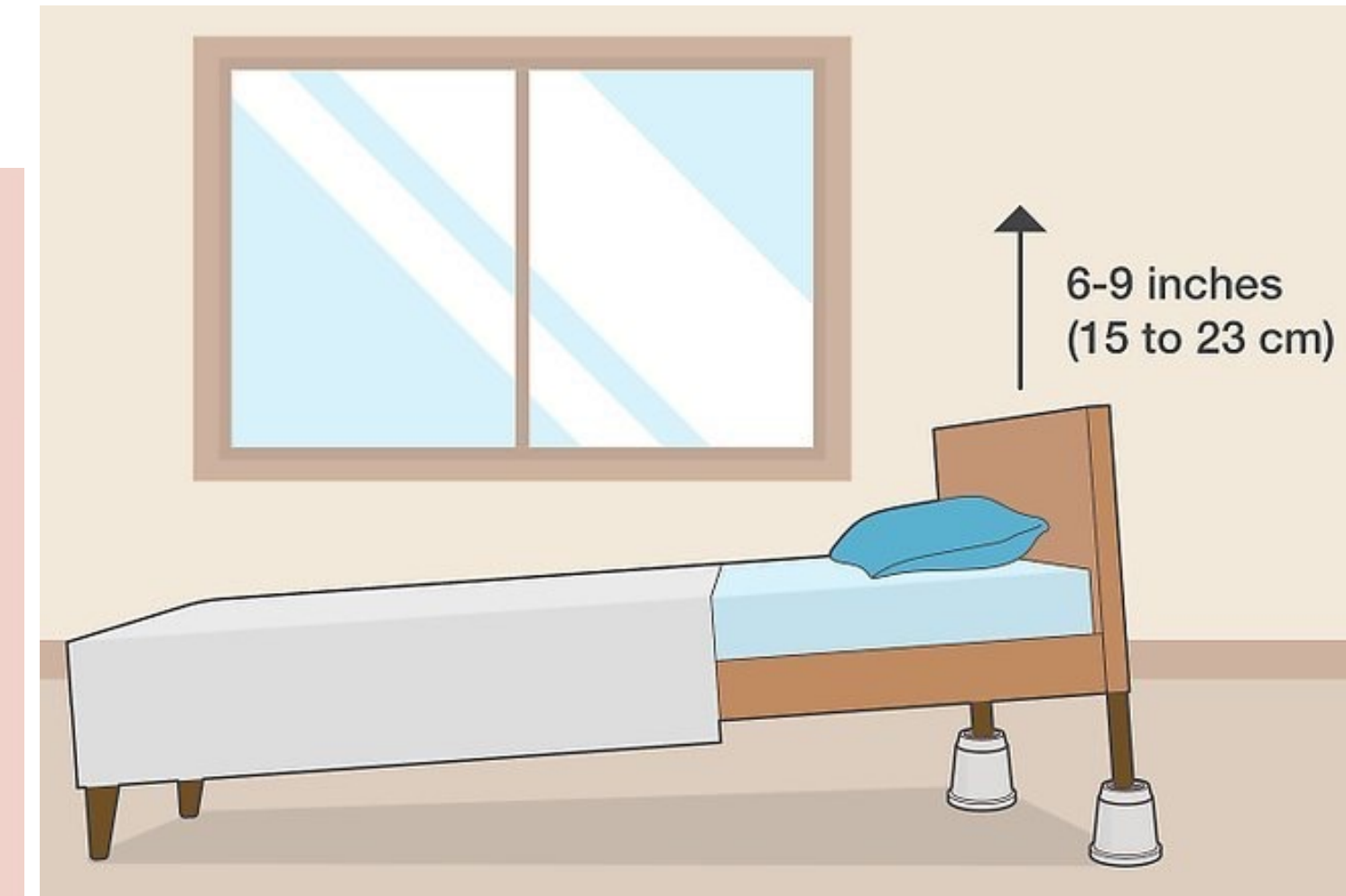
Quality of Life Outcomes

- After antireflux surgery
 - Partial vs Nissen
 - LINX
 - After redo fundoplication
- After Large Paraesophageal hernia repair
- After Heller Myotomy
- Does it change if surgery is done robotic



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Quality of Life after Foregut Surgery



**Surgery is the
LAST RESORT**



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JAMA Surgery | **Original Investigation**

Comparison of Laparoscopic 270° Posterior Partial Fundoplication vs Total Fundoplication for the Treatment of Gastroesophageal Reflux Disease

A Randomized Clinical Trial

Bengt S. Håkanson, MD, PhD; Lars Lundell, MD, PhD; Ami Bylund, RN, PhD; Anders Thorell, MD, PhD

- Mental and Physical aspects of Global QoL assessment significantly increased in both partial and total fundoplication
- Immediate and marked improvement in Reflux, Abdominal pain and Indigestion
- Maintained over 5 years



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25 Years of the GERD-HRQL symptom severity instrument: an assessment of published applications

Vic Velanovich¹

- Total of 767 articles by 562 different first authors in 193 different journals from 53 countries
- Baseline scores highest for GERD and LPR
- Lowest for Barrett's, Obesity, and ENT disorders
- GERD-HRQL is a good assessment of Surgical and Endoscopic treatment success for typical GERD symptoms
- Success usually 50% reduction in score after treatment



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•GERD-HRQL Questionnaire

Question	Score					
1. How bad is your heartburn?	0	1	2	3	4	5
2. Heartburn when lying down?	0	1	2	3	4	5
3. Heartburn when standing up?	0	1	2	3	4	5
4. Heartburn after meals?	0	1	2	3	4	5
5. Does heartburn change your diet?	0	1	2	3	4	5
6. Does heartburn wake you from sleep?	0	1	2	3	4	5
7. Do you have difficulty swallowing?	0	1	2	3	4	5
8. Do you have pain with swallowing?	0	1	2	3	4	5
9. Do you have bloating or gassy feelings?	0	1	2	3	4	5
10. If you take medication, does this affect your daily life?	0	1	2	3	4	5



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Outcomes after anti-reflux procedures: Nissen, Toupet, magnetic sphincter augmentation or anti-reflux mucosectomy?


Zachary M. Callahan¹  · Julia Amundson¹ · Bailey Su¹ · Kristine Kuchta¹ · Michael Ujiki¹

Table 3 Quality of life outcomes

	Nissen	Toupet	MSA
Preop	<i>N</i> = 165	<i>N</i> = 110	<i>N</i> = 33
RSI	17.4 ± 11.9	17.6 ± 10.1	21.3 ± 9.9
GERD-HRQL	13.9 ± 11.6^M	15.6 ± 10.2	19.4 ± 9.6^N
Gas/Bloat	2.2 ± 1.7	2.0 ± 1.4	2.1 ± 1.4
Dysphagia Score	1.3 ± 0.6	1.3 ± 0.8	1.3 ± 0.6

Table 3 Quality of life outcomes

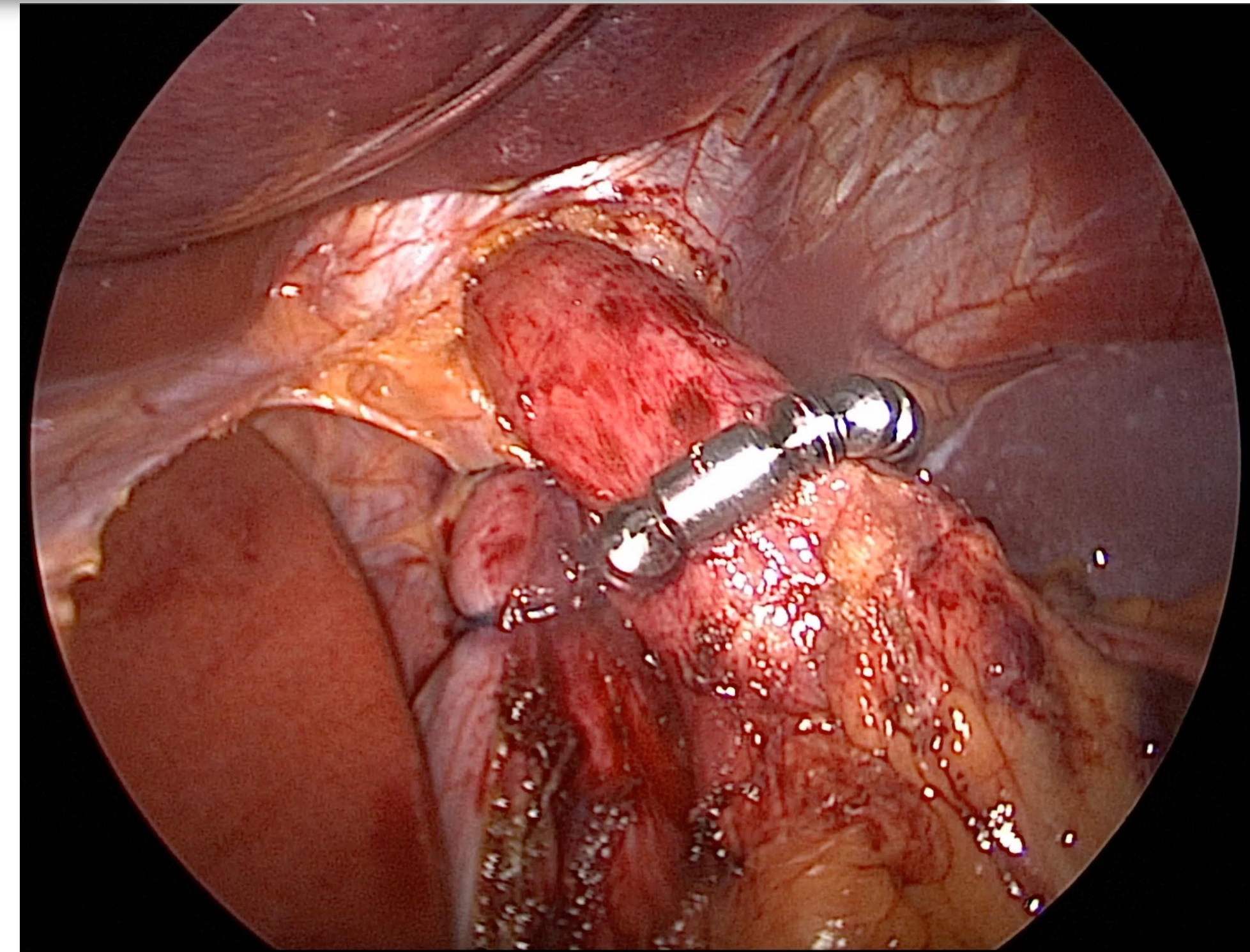
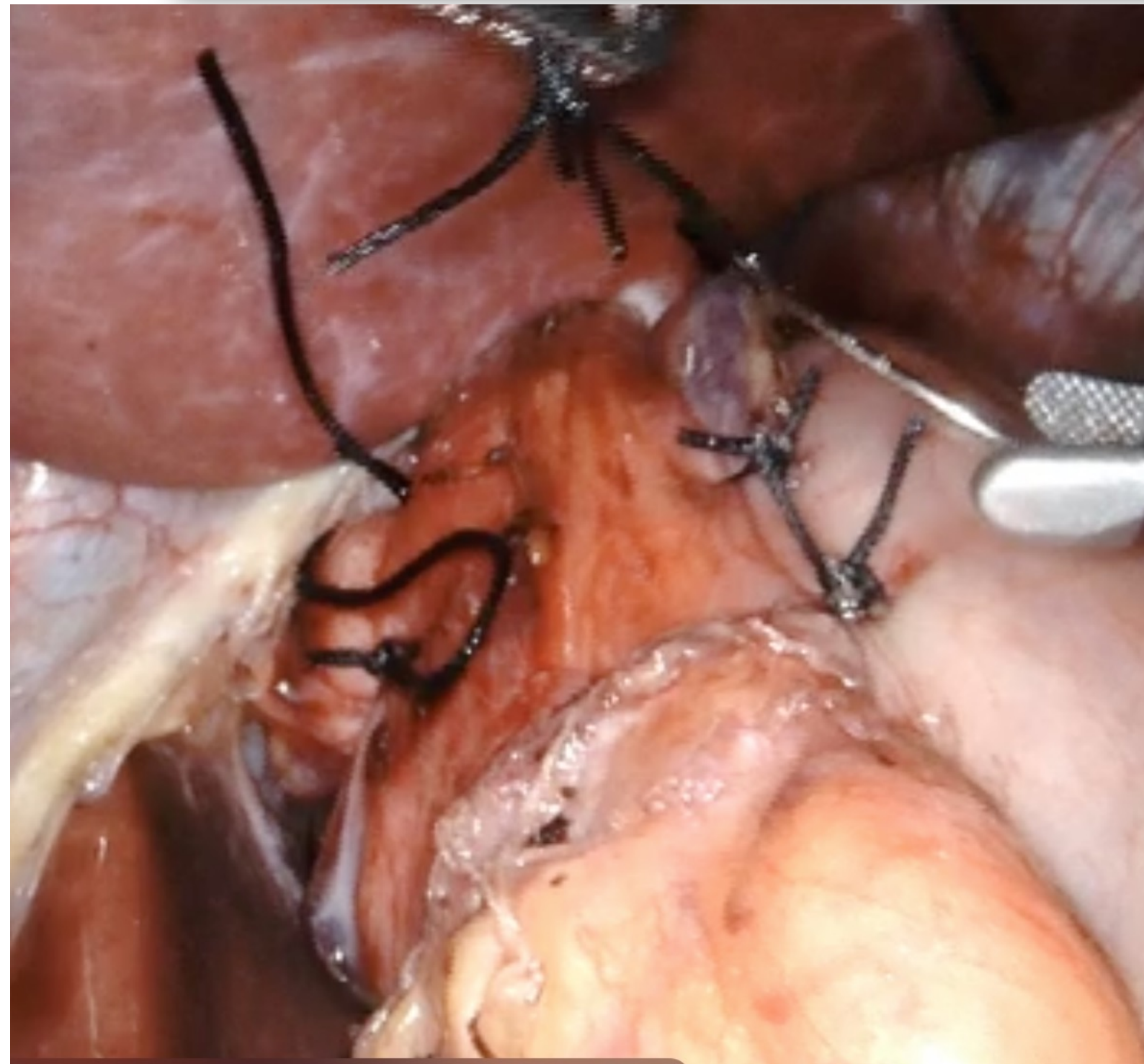
	Nissen	Toupet	MSA
5 Years	<i>N</i> = 85	<i>N</i> = 19	<i>N</i> = 6
RSI	9.0 ± 9.6	4.9 ± 5.7^M	17.8 ± 7.7^T
GERD-HRQL	5.0 ± 7.4	3.7 ± 3.7	9.3 ± 7.3
Gas/Bloat	1.5 ± 1.4	1.7 ± 1.3	1.3 ± 1.6
Dysphagia Score	1.2 ± 0.6	1.3 ± 0.9	1.3 ± 0.8



Longitudinal comparison of quality of life in patients undergoing laparoscopic Toupet fundoplication versus magnetic sphincter augmentation

Observational cohort study with propensity score analysis

[Emanuele Asti](#), MD, [Gianluca Bonitta](#), MSc, [Andrea Lovece](#), MD, [Veronica Lazzari](#), MD, and [Luigi Bonavina](#), MD, PhD, FACS*



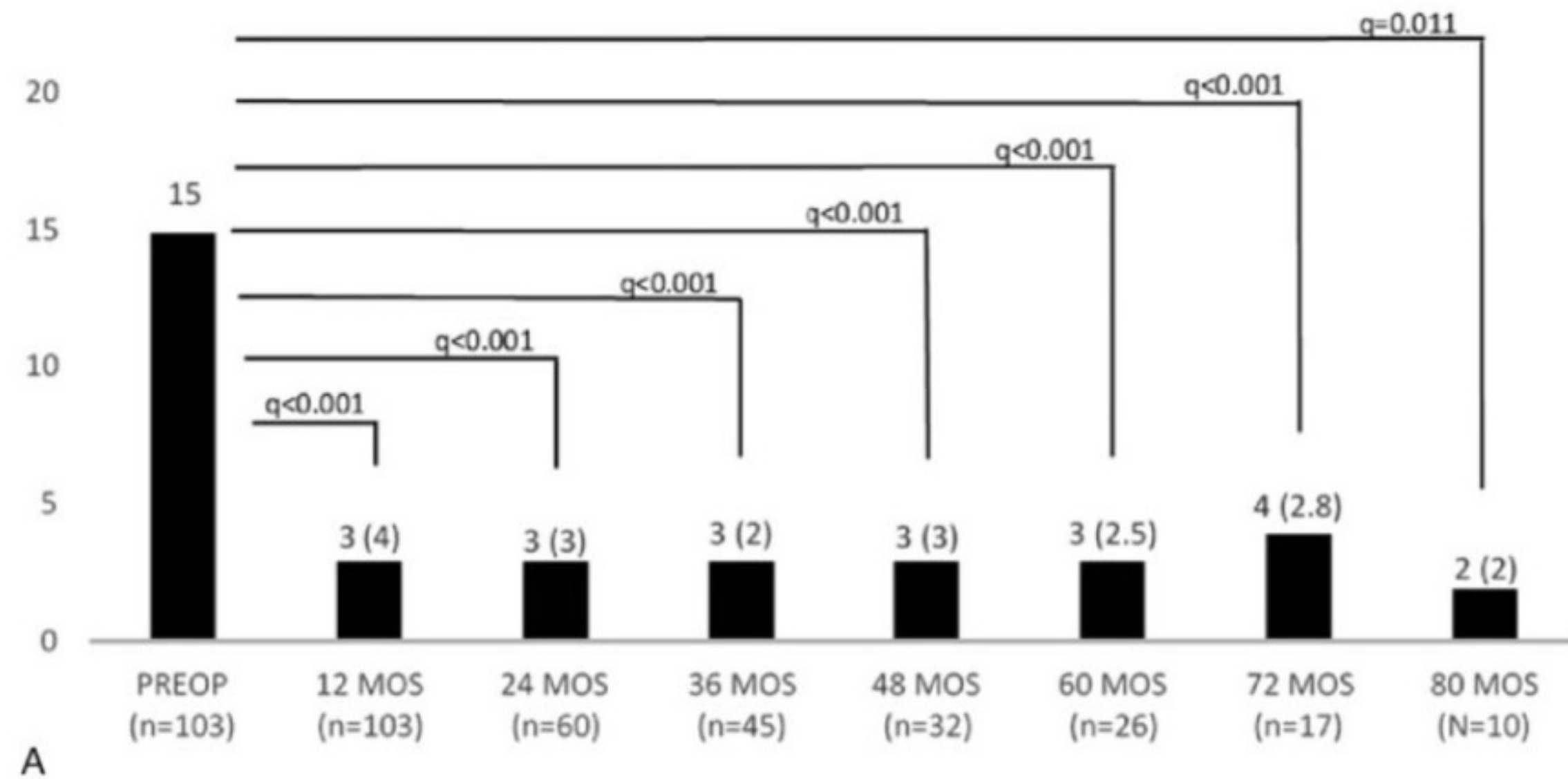
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Longitudinal comparison of quality of life in patients undergoing laparoscopic Toupet fundoplication versus magnetic sphincter augmentation

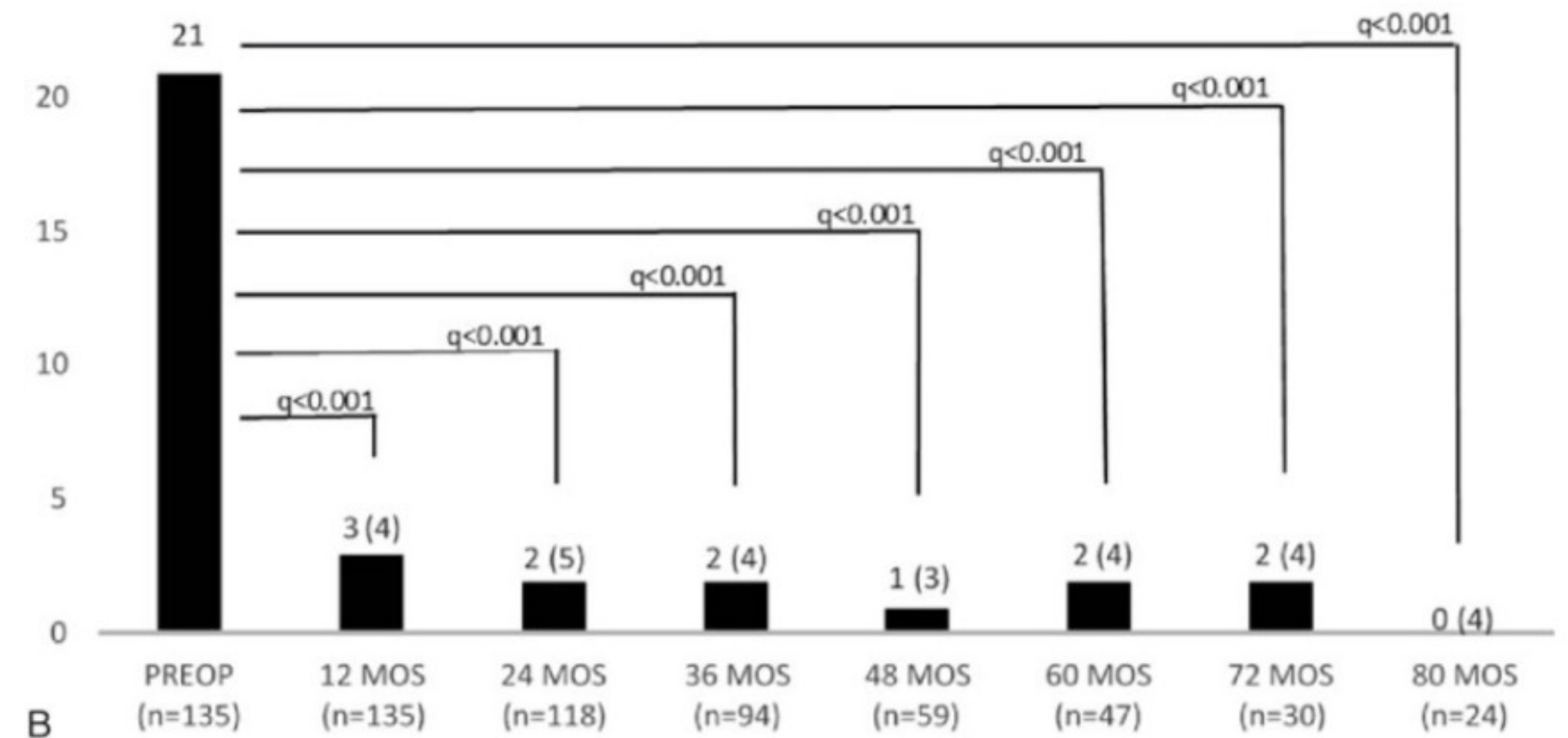
Observational cohort study with propensity score analysis

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GERD-HRQL SCORE (TOUPET)



GERD-HRQL SCORE (LINX)



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Quality of life and symptom assessment in paraesophageal hernias: a systematic literature review of reporting standards

Nikhil M. Patel,^{1,†} Aiysha Puri,^{1,†} Viknesh Sounderajah,¹ Lorenzo Ferri,² Ewen Griffiths,^{3,4} Donald Low,⁵ Nick Maynard,⁶ Carmen Mueller,² Manuel Pera,^{7,8} Mark I. van Berge Henegouwen,⁹ David I. Watson,^{10,11} Giovanni Zaninotto,¹ George B. Hanna,¹ and Sheraz R. Markar,^{1,12} on behalf of the Para-Oesophageal hernia Symptom Tool (POST) Collaborative

Inadequate tools and reporting of quality of life outcomes for Paraesophageal hernia repair

10 Most Frequently Utilised QOL Tools across all 220 included studies

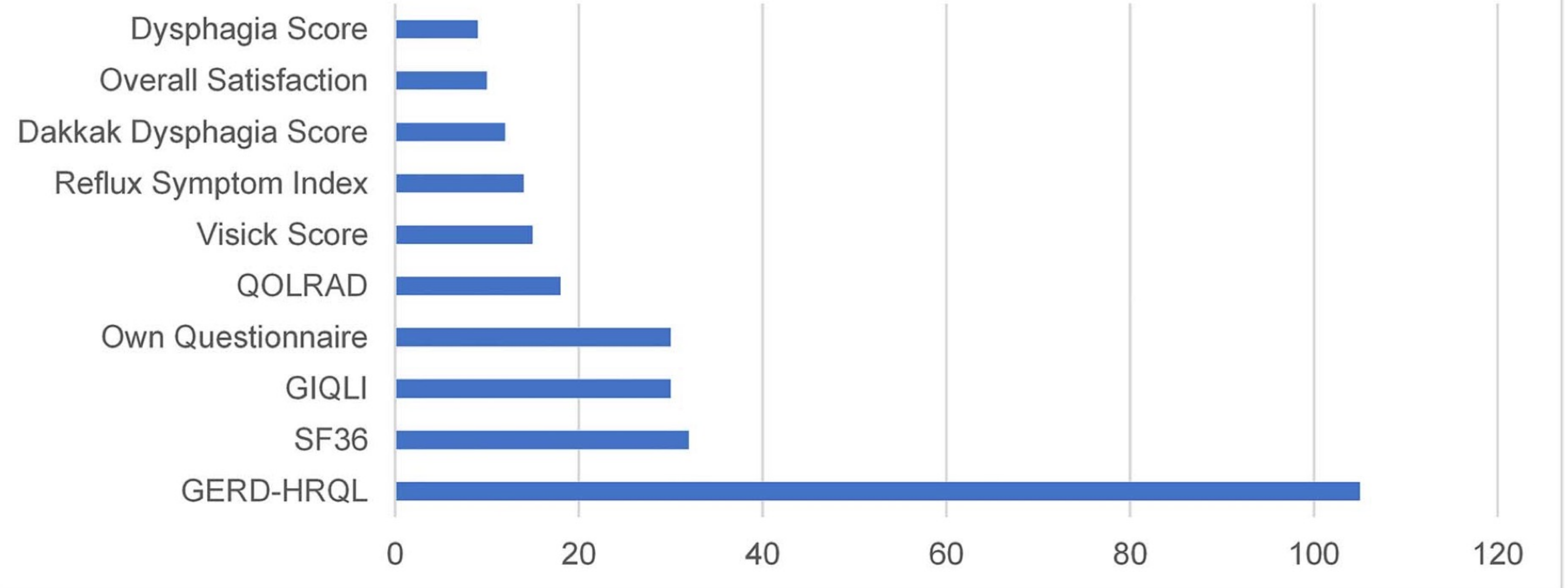


Fig. 2 Top 10 most frequently used Quality of Life tools in all 220 included studies.



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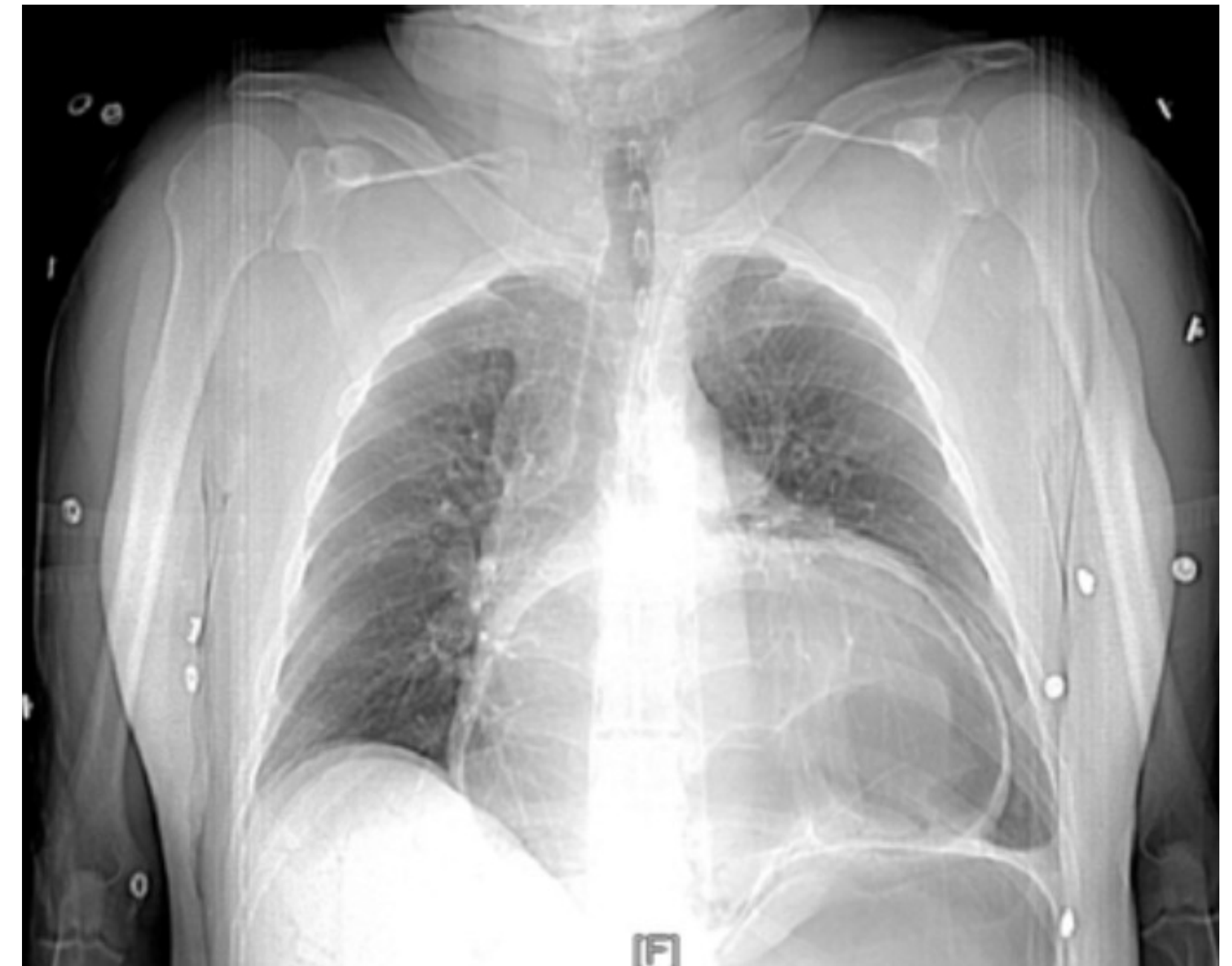
Review > J Minim Access Surg. 2021 Oct-Dec;17(4):435-449.

doi: 10.4103/jmas.JMAS_233_20.

Quality of life after giant hiatus hernia repair: A systematic review

Akshay R Date ¹, Yan Mei Goh ², Yan Li Goh ³, Ilayaraja Rajendran ⁴, Ravindra S Date ⁵

- 29 studies evaluated quality of life pre and post surgery in patients with >50% of their stomach in the chest
- 22 of these studies reported excellent or good post operatively in at least 83% of patients
- Mean follow up of 22 months
- These papers even support repair in patients 70 yrs and older



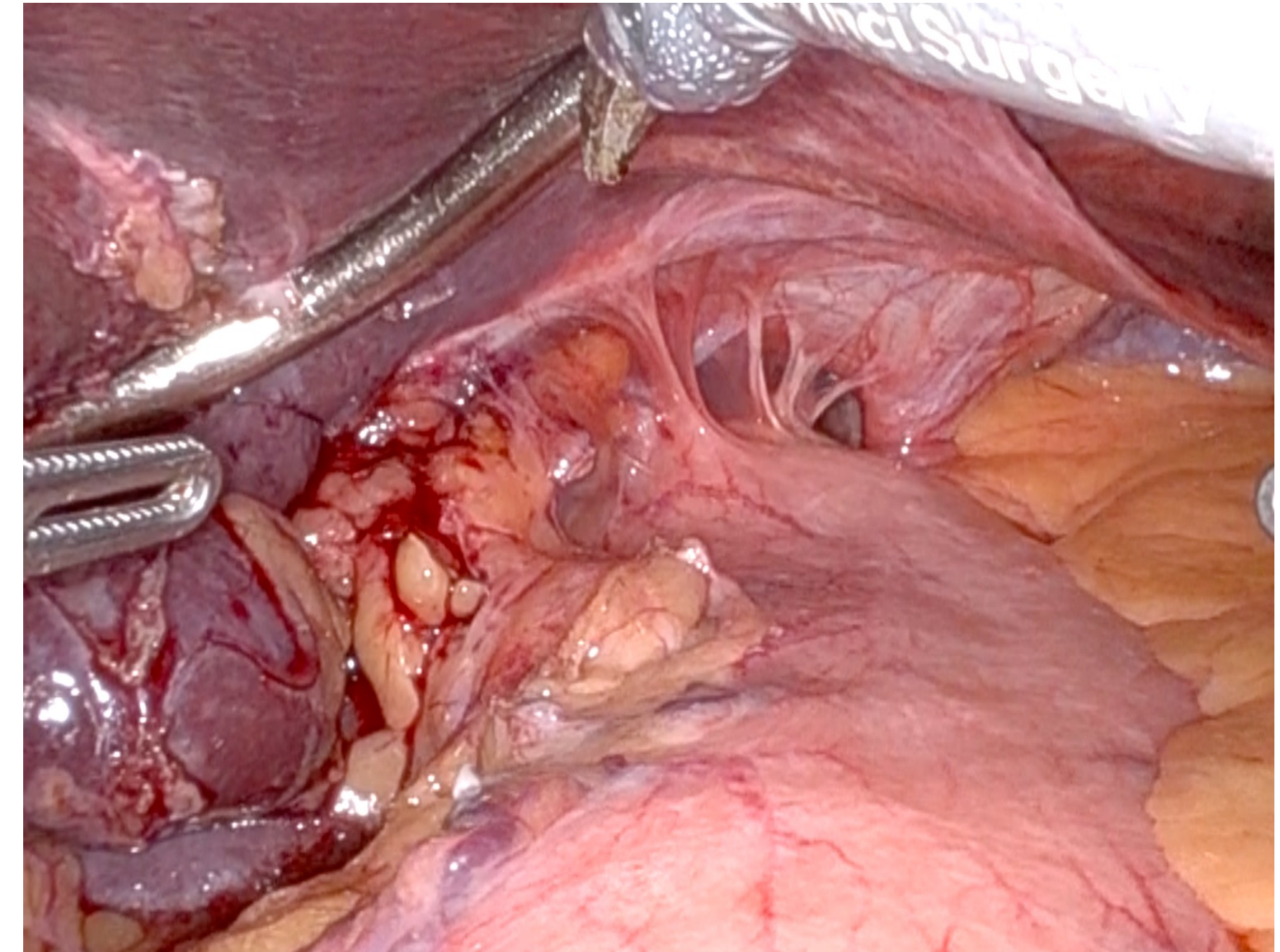
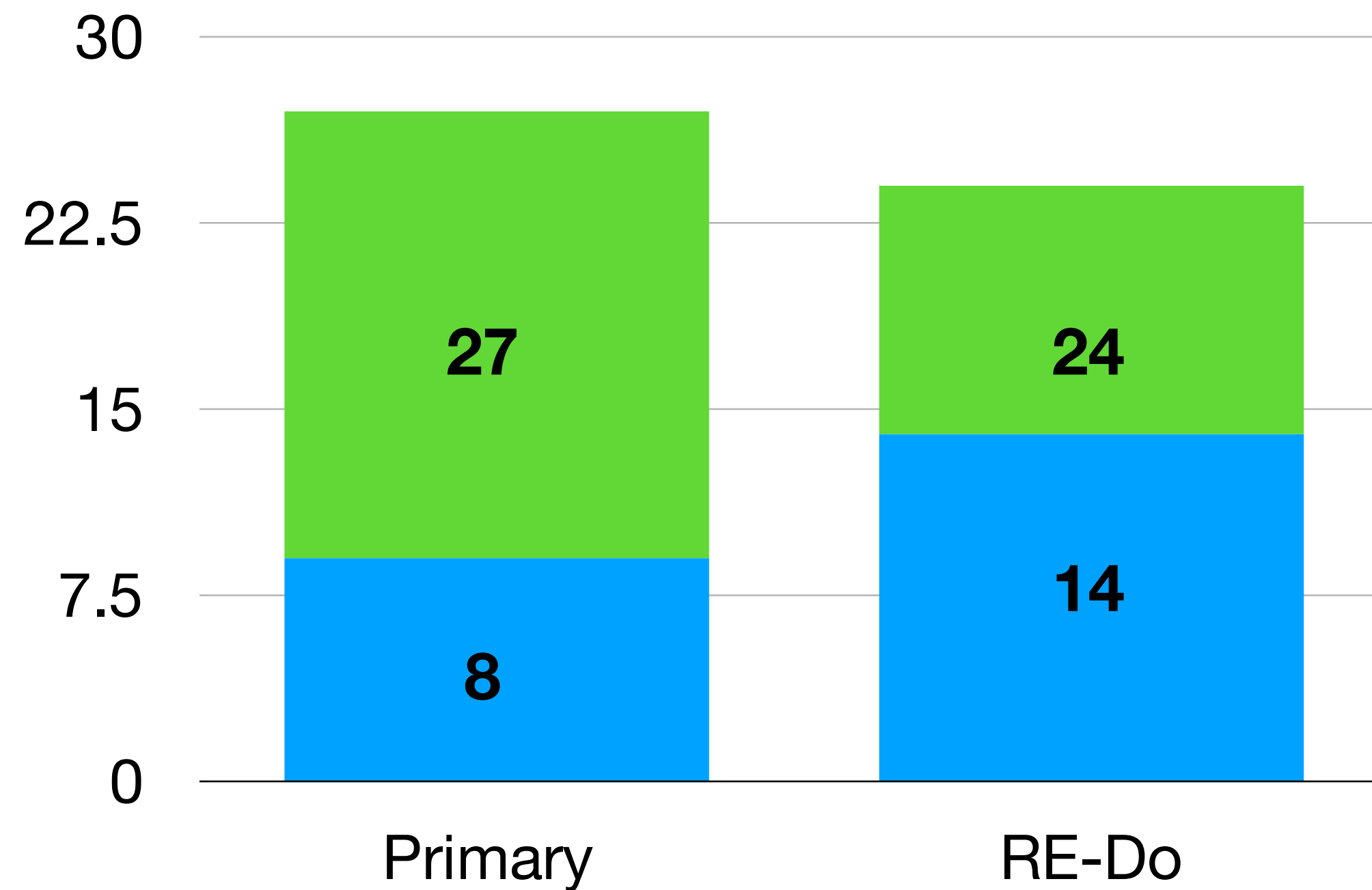
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> [Surg Endosc.](#) 2021 Jan;35(1):298-302. doi: 10.1007/s00464-020-07396-9. Epub 2020 Feb 3.

Laparoscopic fundoplication for refractory GERD: a procedure worth repeating if needed

Zia Kanani ¹, Jon C Gould ²

- 136 primary and 82 preoperative fundoplication



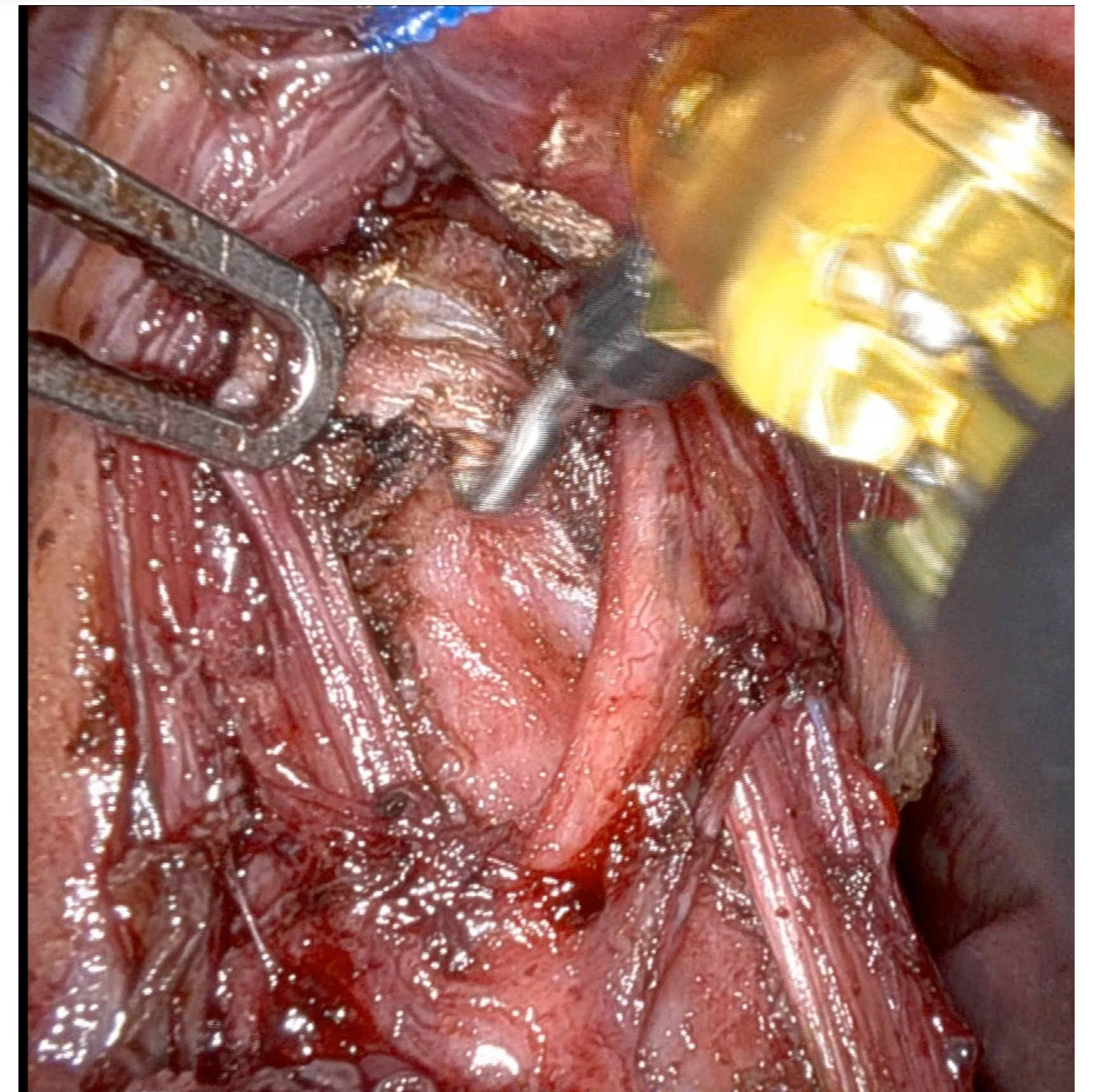
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Quality of life before and after laparoscopic Heller myotomy for achalasia

Aviv Ben-Meir, M.D., David R. Urbach, M.D., M.Sc., Yashodhan S. Khajanchee, M.B.B.S.,
Paul D. Hansen, M.D., Lee L. Swanstrom, M.D.*

*Department of Minimally Invasive Surgery and Surgical Research, Legacy Health System, 501 N Graham St, Suite 120,
Portland, OR 97227, USA*

- 12 of 15 patients we satisfied
- SF 36 showed significant improvement in:
 - Physical Functioning
 - Bodily Pain
 - Vitality
 - Social Functioning



IS QUALITY OF LIFE BETTER IF
DONE ROBOTIC?



Summary

Quality of Life Outcomes

- After antireflux surgery
 - Partial vs Nissen: ✓
 - LINX ✓
 - After redo fundoplication ✓
- After Large Paraesophageal hernia repair ✓
- After Heller Myotomy ✓
- Does it change if surgery is done robotic ✓



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