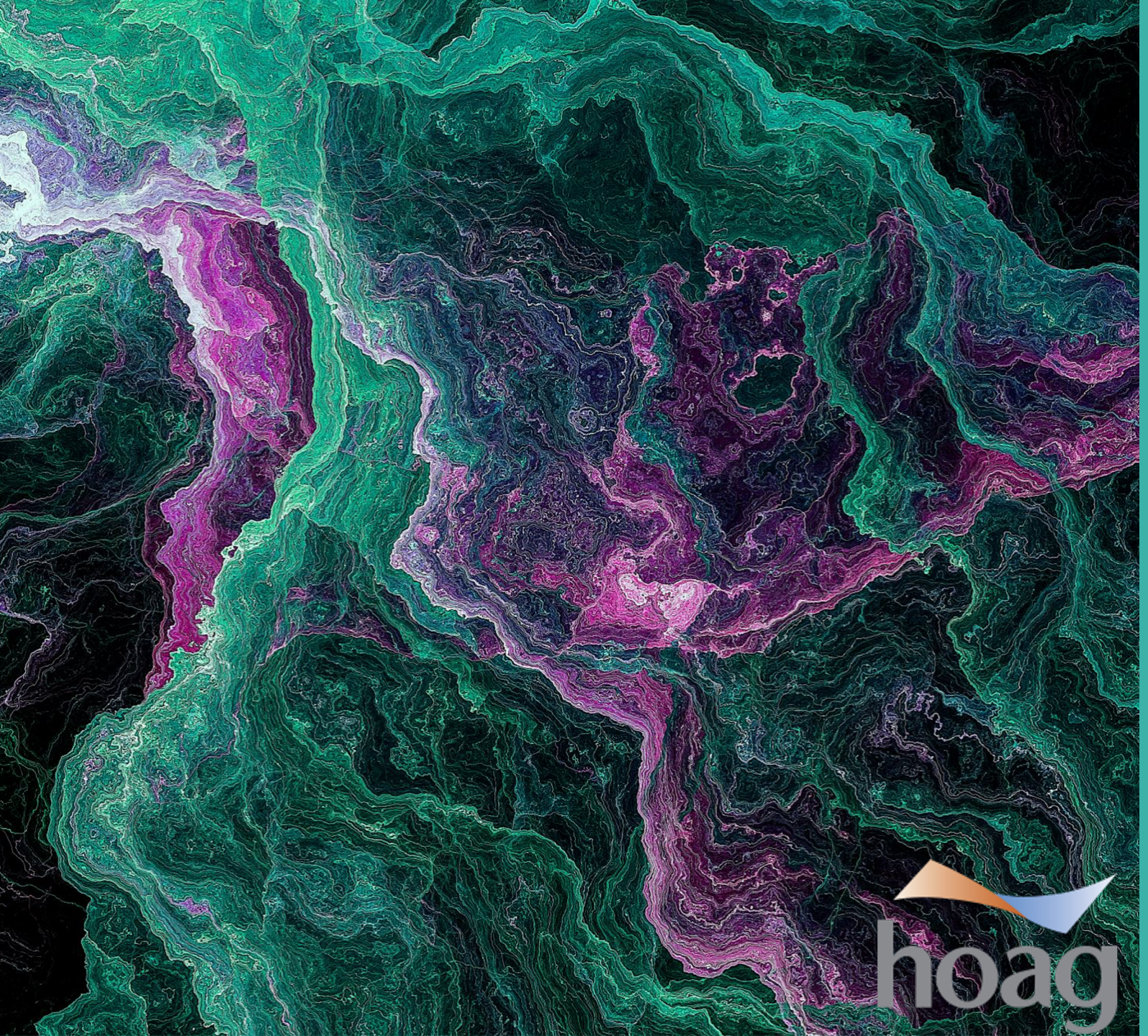

Robot-Assisted Hiatal Hernia Repair with Transoral Incisionless Fundoplication (TIF)

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Arrian Iraniha, B.S.

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Background

Demonstrated that combined laparoscopic HH repair and TIF (cTIF) is safe and effective at reducing reflux symptoms in a large spectrum of GERD patients.

Reference: Novel Interdisciplinary Approach to GERD: Concomitant Laparoscopic Hiatal Hernia Repair with Transoral Incisionless Fundoplication
Alyssa Y Choi, MD, Mary Kathryn Roccato, MD, Jason B Samarasena, MD, Jennifer M Kolb, MD, MS, David P Lee, MD, MPH, Robert H Lee, MD, Shaun Daly, MD, FACS, Marcelo W Hinojosa, MD, FACS, Brian R Smith, MD, Ninh T Nguyen, MD, FACS, Kenneth J Chang, MD

Benefits of Robotic over Laparoscopic HH repair

Technical advantages over laparoscopic hiatal hernia repair with similar clinical outcomes

- Shorter length of stay (2.2 days vs 3.3 lap)
- Lower recurrence rates (13.2% vs 32.8% lap)

Associated with improved outcomes compared to laparoscopic hiatal hernia repair

- Shorter length of stay (1.3 vs 1.8 lap)
- Lower complication rates (6.3% vs 19.2% lap)

Reference: Robotic Versus Laparoscopic Approach to Hiatal Hernia Repair: Results After 7 Years of Robotic Experience

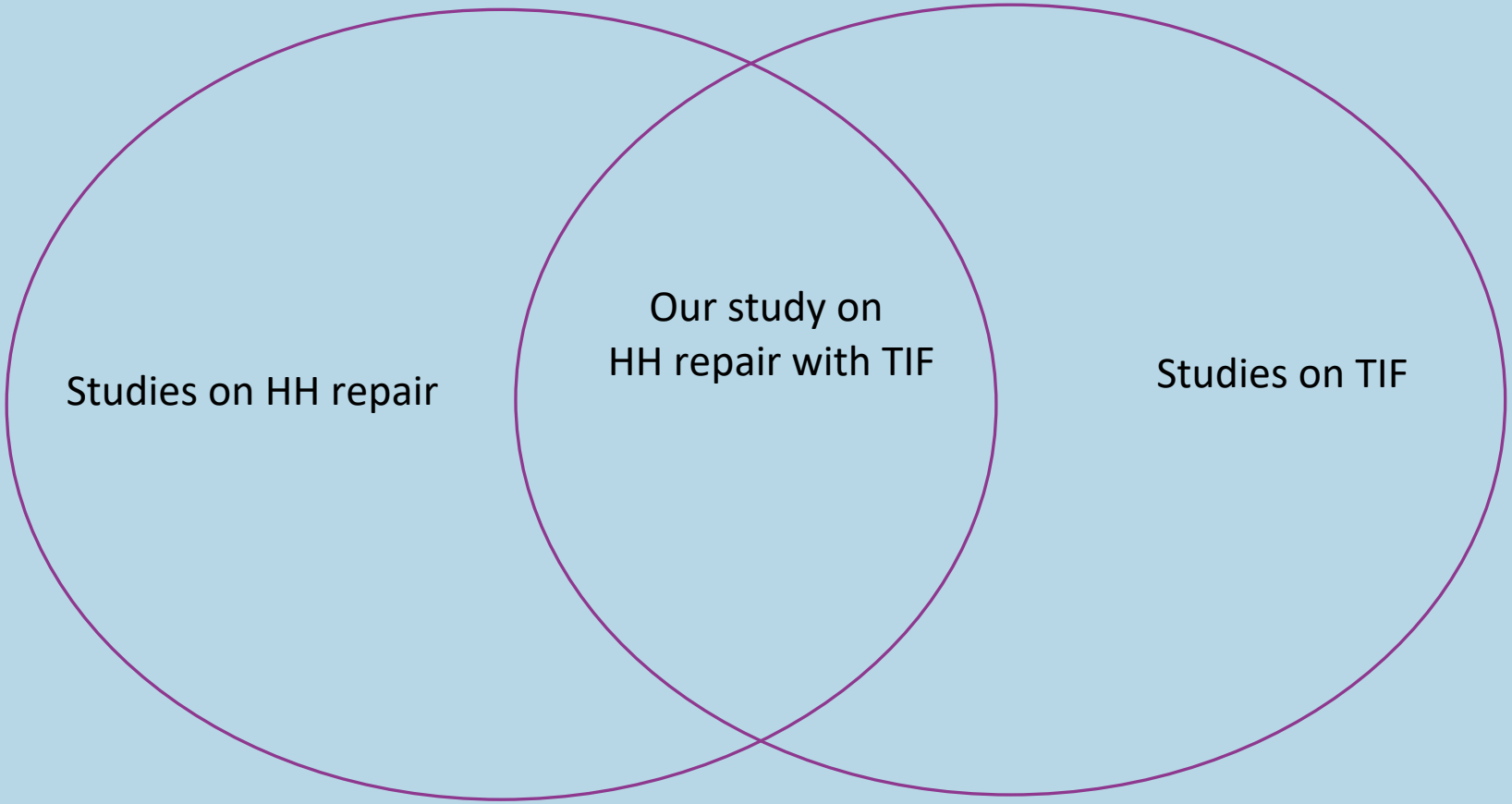
Sean C O'Connor, Matthew Mallard, Shivani S Desai, Francisco Couto, Matthew Gottlieb, Alex Ewing, William S Cobb, Alfredo M Carbonell, Jeremy A Warren

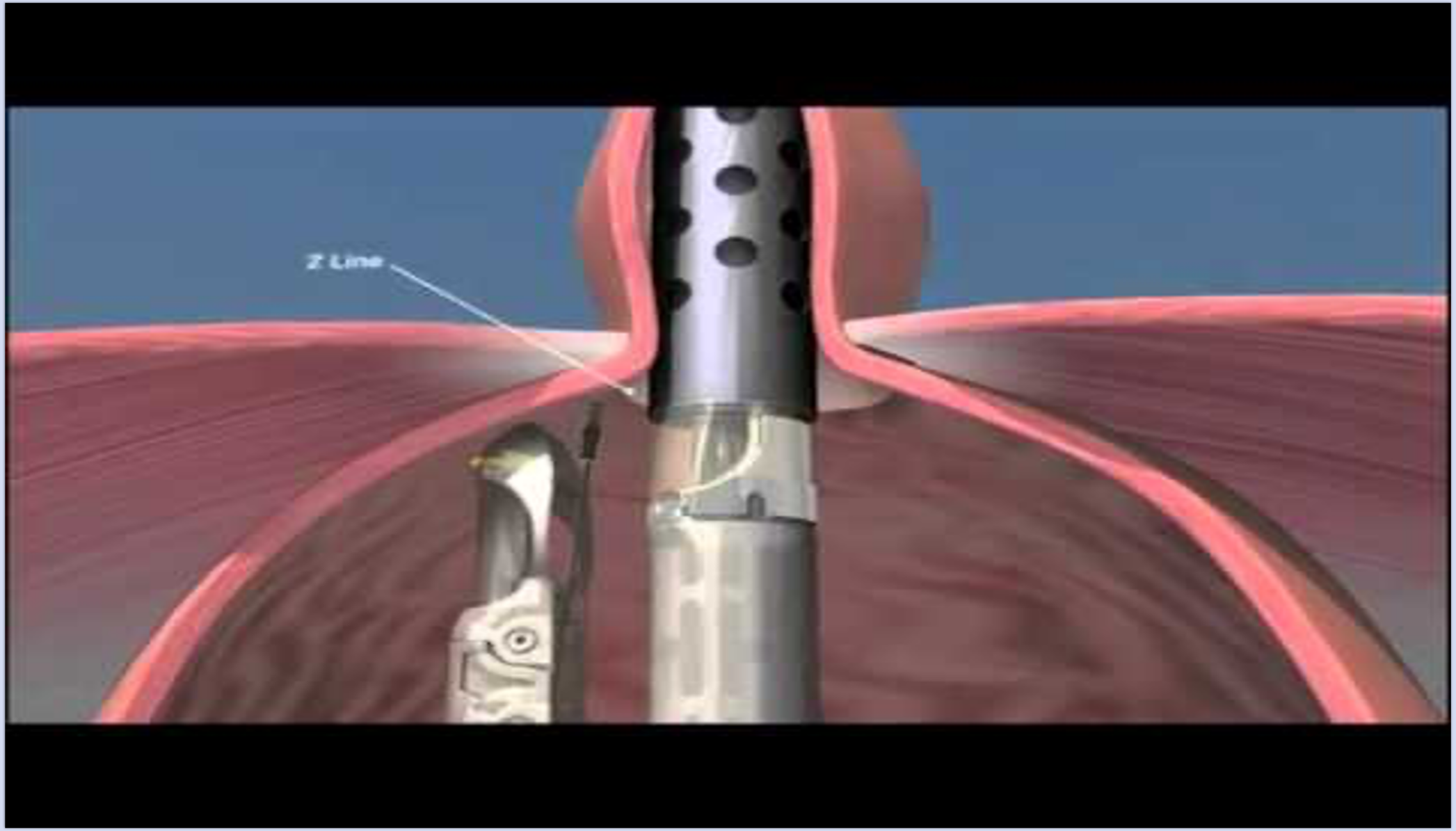
Reference: **Robot-assisted hiatal hernia repair demonstrates favorable short-term outcomes compared to laparoscopic hiatal hernia repair**

Basem G Soliman , Duc T Nguyen , Edward Y Chan , Ray K Chihara , Leonora M Meisenbach, Edward A Graviss, Min P Kim

Why our study matters

No prior study has reported a series of patients who have undergone robotic HH repair with TIF.

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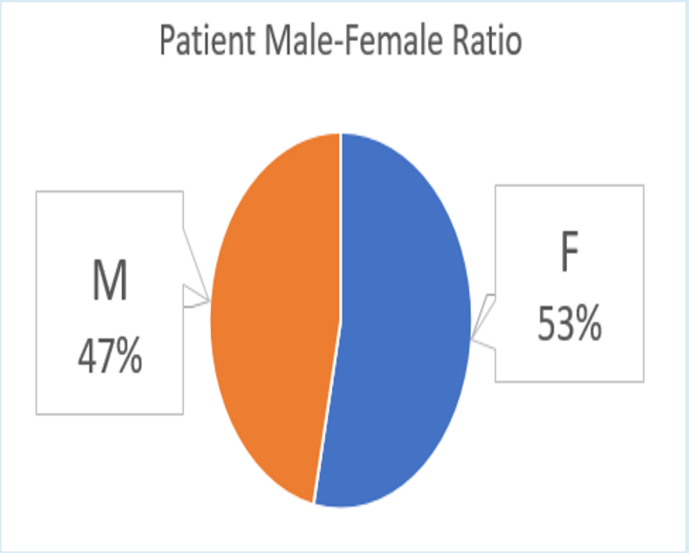
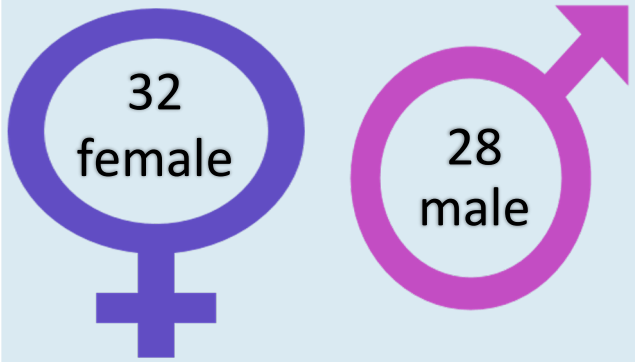
Methods

60 patients underwent cTIF.

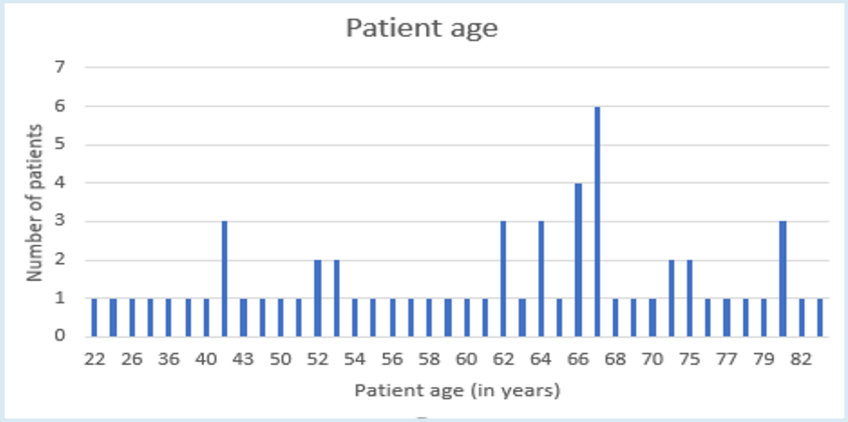
Retrospective analysis of a series of 60 consecutive patients who underwent robot-assisted cTIF from 4/2019 to 4/2021





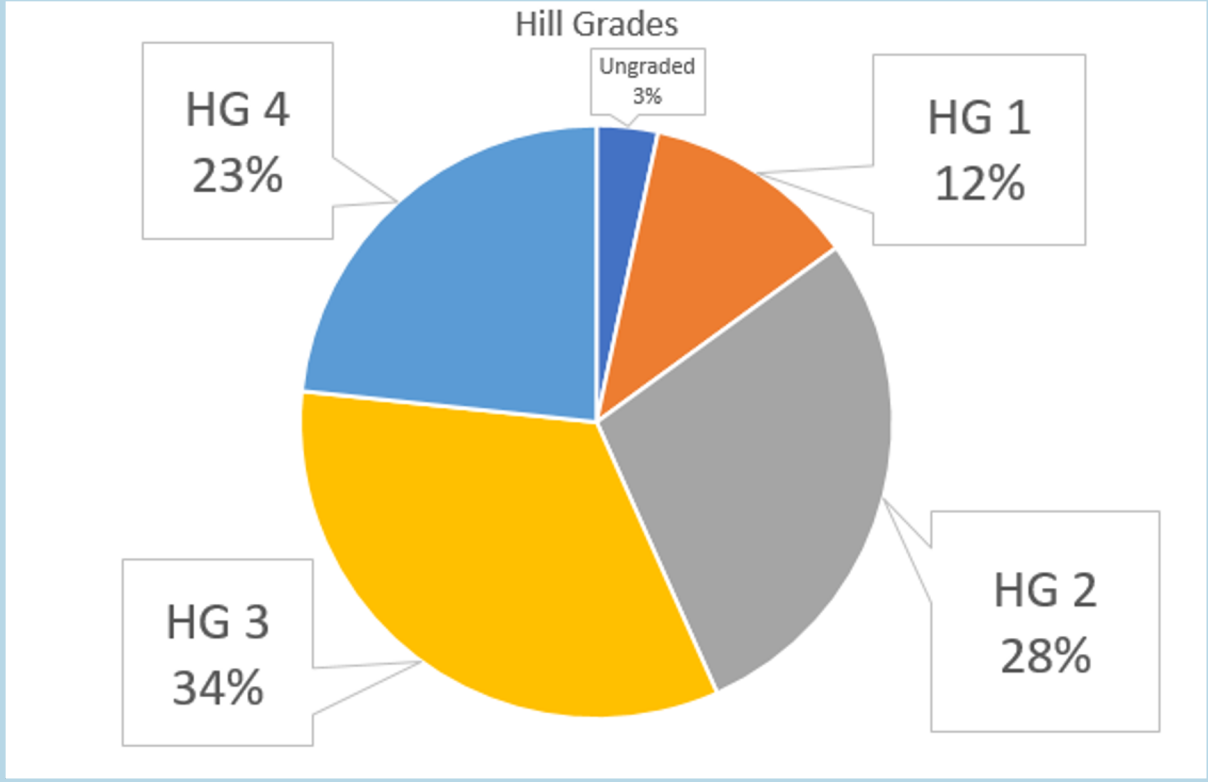
Mean age:
59.9

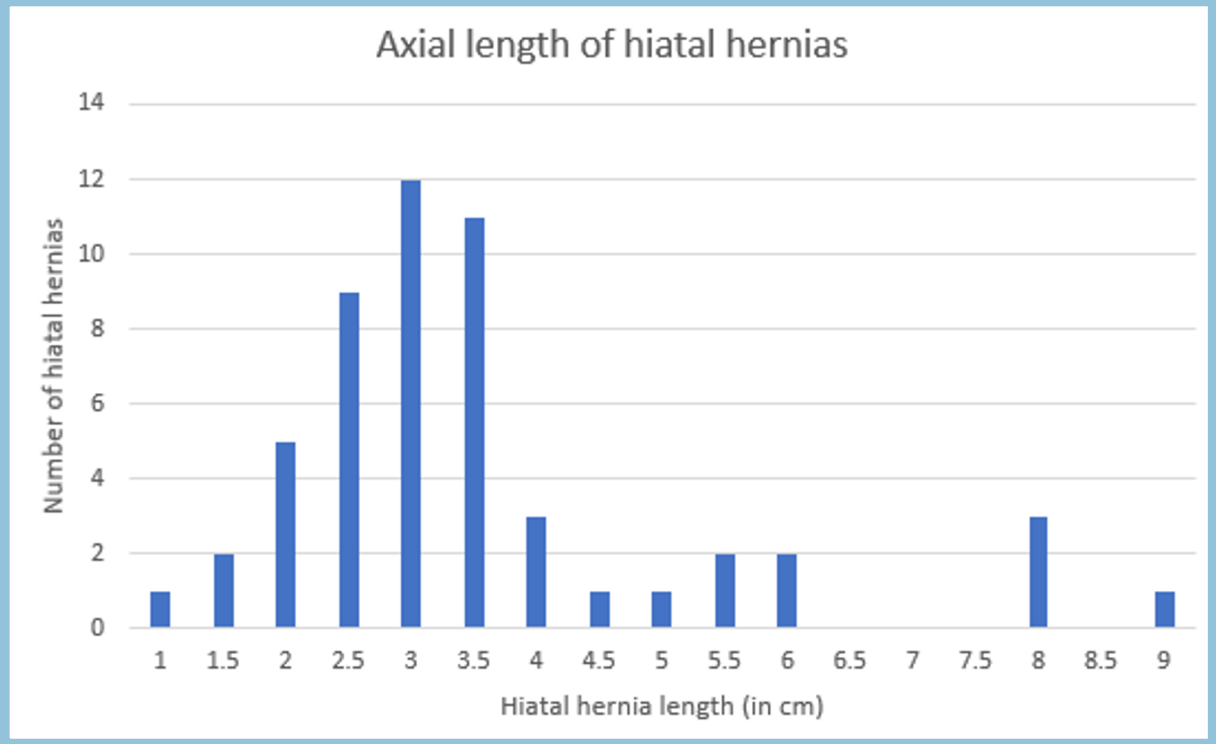
Range:
22-83



>50%

of patients had pre-cTIF Hill Grades greater than II





HH axial length mean: 3.6 cm (range 1-9)

Intraoperatively, 11 patients had HHs with transverse diameters ≥ 5 cm

HH transverse diameter mean: 3.5 cm (range: 1.5-7)

Mean surgical time for:

robot-assisted HH repair

131 minutes

TIF

84 minutes

TIF Procedural success

100%

Methods

Pre and post-treatment GERD symptoms and anti-acid medication usage were assessed.

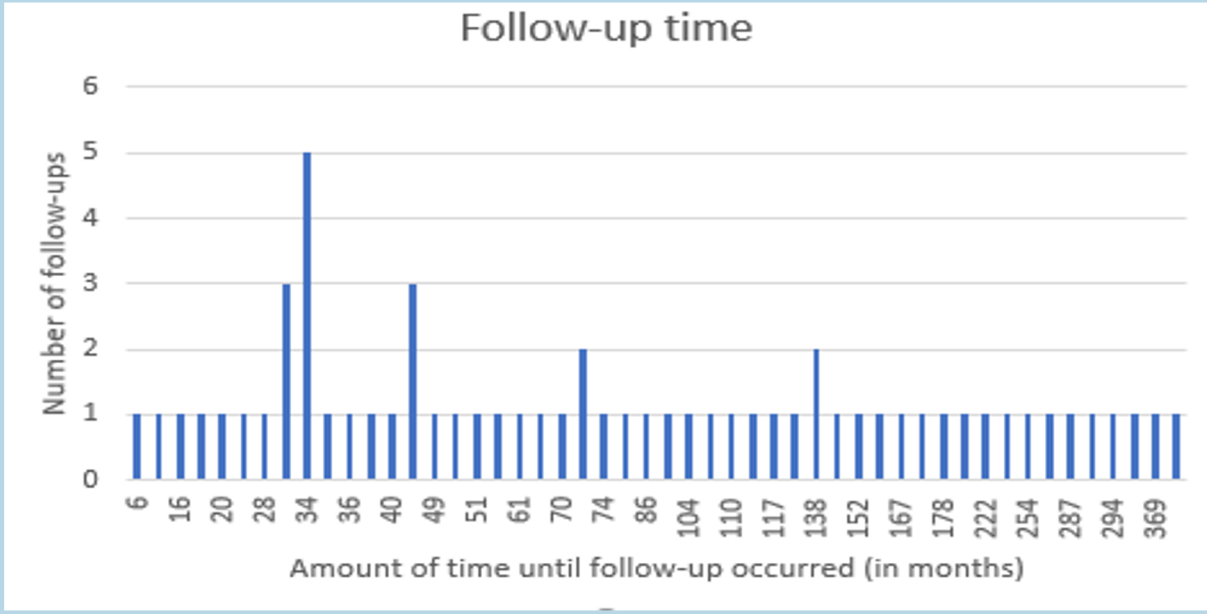
Follow-up within: 12 months

0

patients lost to follow up

Mean follow-up interval:

3.5 months



Results

55 of 60

Patients on anti-acid meds before cTIF experienced symptom relief and decreased or discontinued using their meds

92%

Results

Robot-assisted cTIF effectively reduces GERD symptoms, even in patients with larger HHs.

Follow-up endoscopy on 18 patients revealed an intact TIF valve.

Zero patients required a preceding esophageal lengthening procedure

Patients tolerated the procedure well with no reported complications.

hoag

Conclusion

Future studies should examine the long-term outcome of robotic-assisted cTIF vs laparoscopic cTIF.

Thank you!

Questions