

Does Surgeons' Specialty Affect Surgical Approach and Perioperative Outcomes in Paraesophageal Hernia Repairs?

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INTRODUCTION

- Paraesophageal hernia (PEH) repair is the most common operation of the esophagus.
- These procedures are performed by both general (GS) and thoracic surgeons (TS)
- It is unclear whether variability in surgeons' specialty impacts the approach and perioperative outcomes of PEH repairs.

METHODS

- The 2014-2016 National Surgical Quality Improvement Program (NSQIP) database was analyzed for adults who underwent repair of PEH via an abdominal approach by GS and TS.
- Patient demographics and intraoperative variables (operative time [OT], need for Collis gastroplasty [CG], and laparoscopic/open approach) were collected and analyzed.
- Postoperative outcomes were compared.

RESULTS

- A total of 12,940 patients were included in this study (GS:12,298 TS:642).
- Patients in the GS cohort were predominantly females (71.8% vs. 67.8%, p=0.015), younger (60.9 years vs. 63.4 years, p=0.001), and had a higher body mass index (31.0 vs. 29.0, p=0.005).
- Patients in the TS cohort had higher rates of preoperative dyspnea (15.6% vs. 11.3%, p=0.001) and chronic obstructive pulmonary disease (8.1% vs. 5.6%, p=0.004).
- Postoperative outcomes demonstrated in Table 1.

RESULTS

	GS (n= 11,298)	TS (n= 642)	p-Value
Approach			0.001
Laparoscopic	11412 (92.8)	546 (85.0)	
Open	821 (6.7)	89 (13.9)	
Converted	65 (0.5)	7 (1.1)	
Setting			0.001
Inpatient	8604 (70.0)	533 (83.0)	
Outpatient	3694 (30.0)	109 (17.0)	
Collis Gastroplasty	272 (2.2%)	69 (10.7%)	0.001
Length Of Stay	2.9 days (3.5)	5.6 days (4.8)	0.006
Operative Time	141.8 min (71.7)	167.1 min (82.3)	<0.0001
Myocardial Infarction	40 (0.3)	6 (0.9)	0.011

No difference in postoperative surgical site infection, pneumonia, urinary tract infection, sepsis, days on ventilator, venous thromboembolism, renal insufficiency, postoperative bleeding, or return to the operating room in

CONCLUSIONS

- On linear regression analysis TS was associated with increased OT after adjusting for age, BMI, gender, race, hypertension, dyspnea, steroid use, COPD, need for CG, and operative approach (p<0.0001).
- Both GS and TS have similar perioperative outcomes for PEH repairs.
- Open approach, need for collis gastroplasty, increased length of stay, increased operative times, and postoperative myocardial infarctions rates were more prominent in the TS on univariate analysis.
- Such findings may be attributed to increased tendency to perform a collis gastroplasty and open approach in the TS cohort.
- Difficult to delineate why OT were increased in the TS on linear regression from this NSQIP database.

DISCLOSURES

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