

Disclosures

- No financial disclosures

IMPACT OF LAPAROSCOPY ON TRAINING:
ARE OPEN APPENDECTOMY AND CHOLECYSTECTOMY
ON THE BRINK OF EXTINCTION?

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Background

- The surgical experience of present-day surgery residency training has evolved from the contributions of laparoscopic surgery
- Some traditionally open procedures are now more descriptive and less of a familiarity to many general surgery residents (GSR)
- We hypothesize that GSR open operative experiences, specifically appendectomies and cholecystectomies, are insufficient compared to the gold standard of laparoscopy today

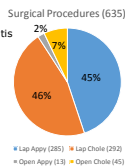
Methods

- Retrospective, single-center, consecutive cohort study
- Identified from the hospital ACS-NSQIP database
- All operative procedures involving the appendix and gallbladder over a 30-month period
 - All PGY level GSR operative experience was recorded
 - Designated preliminary interns and any operative cases completed without a GSR were excluded from the study



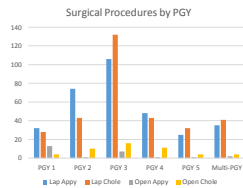
Results

- 635 total appendix and gallbladder surgical procedures identified
 - Appendectomies:
 - 285 laparoscopic (95.6%)
 - 13 converted to open (4.3%) for perforated gangrenous appendicitis
 - Rocky-Davis: 15%; Lower-midline: 84.6%
 - Cholecystectomies:
 - 292 laparoscopic (86.6%)
 - 14 (4%) with cholangiogram
 - 45 open (13.3%)
 - 37 open, 6 conversions, 2 CBD exploration
 - Majority of cases were completed as inpatient (83.6%) by acute care surgeons
 - 20 different GSR involved with procedures



Results

	n(%)	PGY 1	PGY 2	PGY 3	PGY 4	PGY 5	Multi-PGY level, n(%)
Laparoscopic Appendectomy, n	285 (44.8)	32	74	106	48	25	35
Appendectomy, n	13 (2)	1	7	1	1	3	2
Laparoscopic Cholecystectomy, n	278 (43.7)	28	43	132	43	32	41
Cholangiogram, n	14 (2)	2	3	5	3	1	3
Cholecystectomy, n	45 (7)	4	10	35	11	4	4
Laparoscopic to Open	6	0	1	1	3	1	1
Open	37	4	9	33	8	3	3
Open with CBD exploration	2	0	0	2	0	0	0



Conclusions

- General surgery residents have unequal operative experience for case-specific open procedures
- A competency-based system to demonstrate a resident's hands-on surgical skill is fundamental to residency training and should be considered for specific type of low-volume open surgical cases

Thank You!

