

ESTABLISHING A LAPAROSCOPIC SURGERY SERVICE IN THE UK FOR PAEDIATRIC INFLAMMATORY BOWEL DISEASE IN COLLABORATION WITH ADULT COLORECTAL SURGEONS IS FEASIBLE AND SAFE

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Aim of the Study: The National Training Programme for Laparoscopic Colorectal Surgery (LAPCO programme) has established a national standard for Adult Colorectal Surgeons (ACS) in the UK to become proficient in and spread the use of laparoscopic techniques in their practice. In Paediatric Surgery the application of laparoscopy to the surgical management of inflammatory bowel disease (IBD) remains sporadic and inconsistent. Our aim is to review our experience with the use of preceptorship and collaboration with a local peripatetic ACS trainer in establishing the application of laparoscopic surgical approaches to the management of paediatric IBD and report outcomes.

Methods: Retrospective review of case notes of patients who underwent surgery from November 2009-December 2016 in our department. Outcome measures included: types of surgery, role of ACS, duration of surgery, length of stay and post-operative complications.

Main Results: 55 patients underwent at total of 65 operations (45 laparoscopic) for IBD during this period. Details of the procedures undertaken are shown in Table 1. The ACS performed the first 4 laparoscopic procedures; subsequently all (n=54) laparoscopic procedures (excluding pouch surgery) have been undertaken independently by the Paediatric Surgeon. All ileo-anal pouch procedures (n=8) have been counseled by and undertaken by the ACS as the primary surgeon. The ACS preceptorship taught us about: patient positioning, additional equipment required, use of Harmonic shears, stapled anastomoses, techniques of dissection and vascular safety, ergonomics, retrieval of specimens and safe bowel repositioning.

Conclusions: The application of laparoscopic approaches to the surgical management of paediatric IBD as routine practice is feasible and safe; it should be considered for all children. The availability of colleague peripatetic ACSs in local/regional hospitals in all regions of the UK is a ready resource that should be utilised; the LAPCO programme has set an important precedent that Paediatric Surgeons should seek to replicate.

Table 1. Patient demographics, surgical procedures and outcomes.

DETAILS OF PATIENTS IN STUDY		No.			No.
Primary Diagnosis			Primary Procedures (total)		65
Ulcerative colitis	28		Laparoscopic procedures		45
Crohn's disease	34		Lap sub-total colectomy and end ileostomy		21
			Mean Operative time (range)		245 mins (145-300)
Indeterminate colitis	3		Lap ileo-caecal resection and ileo-colic anastomosis		15
			Mean Operative time (range)		125 mins (90-220)
Sex (M:F)	31:34		Lap assisted ileo-anal pouch		8
			Mean Operative time (range)		180 mins (140-225)
			Other		1
Mean Age	14.0 years		Open Procedures		17
Age Range	(3.9-18.0)				
Length of stay (median; range) (days)	7 (2-244)		Bowel resection and anastomosis		3
Per-operative blood transfusion	2		Open sub-total colectomy and end ileostomy (or ileorectal anastomosis)		7
Complications (lap surgery)			Diversion stoma		5
Total complication rate:	23%		Other		1
Anastomotic leak	1		Conversion from lap to open		4 (8%)
Bowel obstruction	6				
Stomal problems	2				
Enterocutaneous fistula	1				
Wound infections	1				
Post op collections	4				