

2004 New Progress Conference in MIS

Laparoscopic Surgery For Inflammatory Bowel Disease



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Laparoscopic Crohn's Surgery


- Obstruction (strictures)
- Pain (usually with fistula)
- Abscess
- Perforation
- Bleeding



Laparoscopic Crohn's Surgery

Controversial!!!

- Technical challenges - mesentery & inflammation, previous surgery, on steroids
- Thoroughness of assessment? (missed lesions)
- Are there advantages?



Prospective, randomized trial comparing laparoscopic vs. conventional surgery for refractory ileocolic Crohn's disease. Milsom et al. Dis Colon Rectum 2001;44(1):1-8

N=60

CONCLUSION:

Faster recovery in the LAP group:

Pulmonary function is better


Length of stay: 1 day less in LAP

No differences in:

- analgesic use (IV)

- recovery of GI function

Fewer complications (5/31 LAP, 9/29 CON)

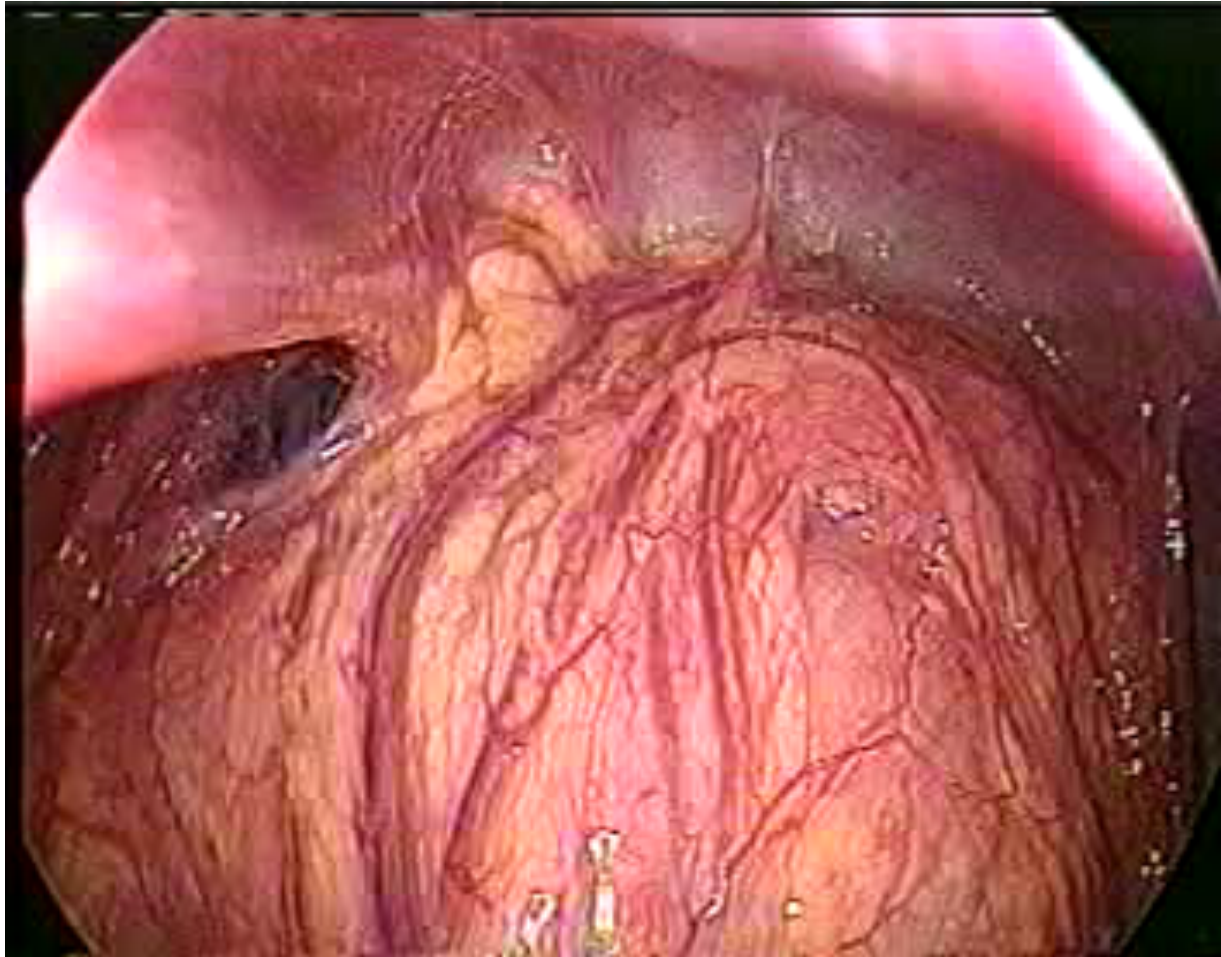
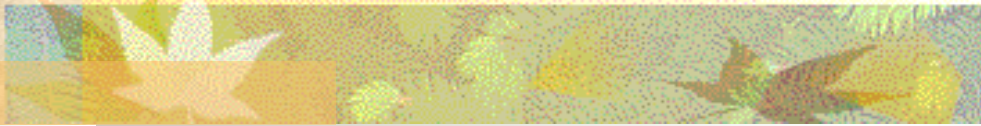


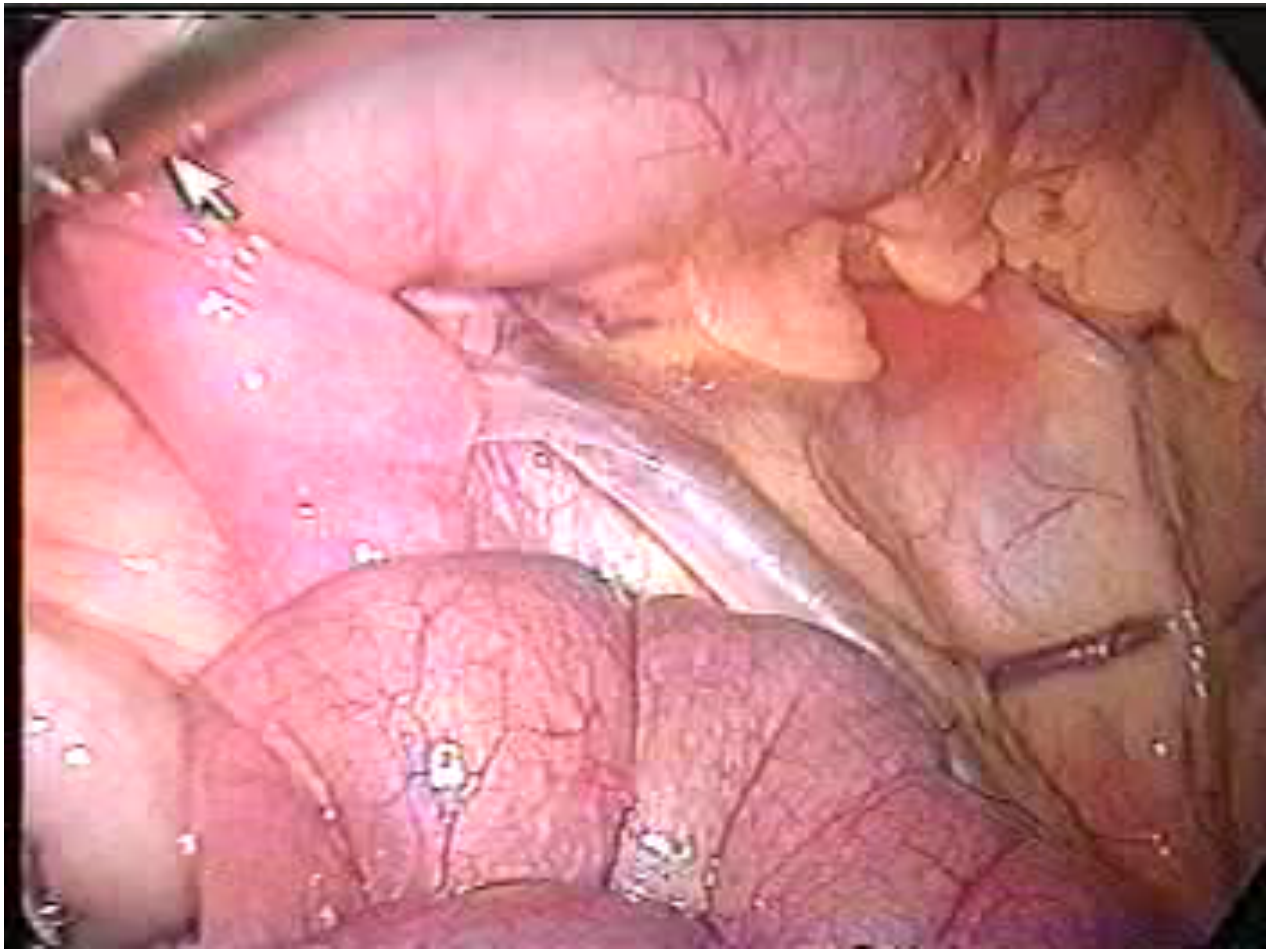
Advantages of laparoscopic resection for ileocolic Crohn's disease. Improved outcomes and reduced costs. Young-Fadok et al. Surg Endosc 2001;15(5):450-4

N=66

CONCLUSION:

Laparoscopic ileocolic resection for CD is feasible. There are significant postoperative benefits in terms of resolution of ileus, narcotic use, and hospital stay. This approach translates into cost savings of >\$3300 for laparoscopic patients.







Conclusion

Laparoscopic surgery is also safely applicable to complicated cases of Crohn's disease with

- *previous surgery*
- *strictures*
- *fistulas*



Issues in Lap Ileal Pouch (RPC) Surgery


- Is a laparoscopic approach safe for this complex procedure ?
- Are the outcomes comparable to a conventional procedure?
- Are there any advantages ?



Laparoscopic Surgery in Ulcerative Colitis

Early Case Reports

Peters	1992	2 TPC	-
Thibault	1995	4 RPC	-
Lui	1995	5 RPC	? benefit
Wexner	1994	22 RPC	no benefit




**Laparoscopic restorative proctocolectomy:
case-matched comparative study with open
restorative proctocolectomy.** Marcello et al. Dis
Colon Rectum 2000;43(5):604-8

N=40

CONCLUSION:

Lap cases (330, 180-480 minutes) vs. open cases
(230, 180-300 minutes), $P < 0.001$.

Bowel function returned more quickly in lap cases
(2, 1-8 days) vs. open cases (4, 1-13 days), $P = 0.03$; and
the length of stay was shorter in lap cases (7, 4-14
days) vs. open cases (8, 6-17 days), $P = 0.02$



Laparoscopic total colectomy for acute colitis: a case-control study. Marcello et al.
Dis Colon Rectum 2001;44(10):1441-5


N=19 Lap, 29 Open

CONCLUSION:

Lap 210(range,150-270) vs.Open 120 (range,60-180) minutes, $P < 0.001$.

Bowel recovery faster in the lap group 1 (range,1-3) vs 2 (range,1-4) days; $P = 0.003$ and the length of stay was shorter 4 (range,3-13) vs 6 (range,4-24) days; $P = 0.04$.

Complications occurred in 3(16%) lap patients and in 7(24%) conventional patients



One-stage laparoscopic restorative proctocolectomy: an alternative to the conventional approach? Ky et al. Dis Colon Rectum 2002;45(2):207-10

N=32

CONCLUSION:

No conversion

11 postop complications - 1 pelvic abscess, 1 pouch leak. 3 reoperations (1 temporary ileostomy, 1 lysis of adhesions, 1 transpouch drainage).

One-stage laparoscopic-assisted RPC can be performed effectively and safely



Laparoscopic total colectomy: hand-assisted vs standard technique. Nakajima et al. Surg Endosc 2004;18(4):582-6

N=23

CONCLUSION:

One LAP was converted (9.1%). Op time was shorter for HALS than for LAP (210 vs 273 min; $p = 0.03$).

HALS reduces the operative time but patient morbidity rates and recovery are similar to LAP. HALS may be preferable for extensive colorectal procedures such as TPC and TAC.





Laparoscopic Surgery in Inflammatory Bowel Diseases

Crohn's Disease:

- Definite advantages in simple ileocolic disease
- Very feasible for most complex cases with fistulas and multiple strictures



Laparoscopic Surgery in Inflammatory Bowel Diseases

Ulcerative Colitis

- Restorative proctocolectomy with laparoscopic assistance is also promising
- Hand-assisted techniques may reduce operative times