Surgical Management of Inflammatory Bowel Disease

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Colon and Rectal Surgery

Disclosures

- Intuitive Surgical – non robotic research study participant (relationship has ended)

Objectives

- Discuss indications for surgical management of IBD
- Discuss surgical procedures for IBD
- Discuss nonsurgical treatments for IBD related complications

Baton Rouge Colon and Rectal Associates

- Medical treatments have advanced significantly
  - New classes/formulations of biologics
- Indications for surgery in patients with both UC and CD similar
- Need for surgery based on time from diagnoses has been decreasing (73% ->29%)

Steele, Scott R, et al. *The ASCRS Textbook of Colon and Rectal Surgery*. Cham, Springer International Publishing, Imprint Springer, 2022.

Indications for surgery

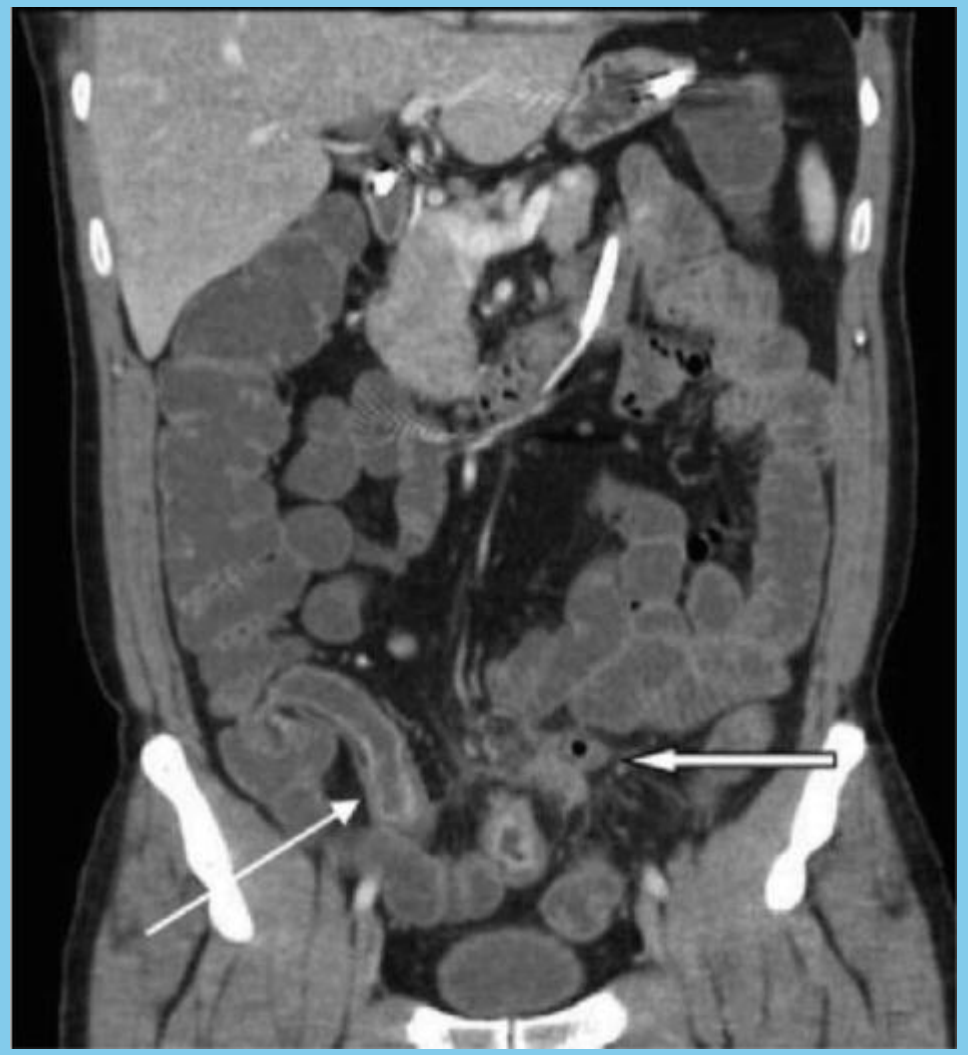
- Failure of medical management
- Bowel Obstruction
- Free perforation
- Abscess/fistula/phlegmon
- Malignancy
- Bleeding
- Toxic colitis

Failure of medical management

- Good symptom control but cannot tolerate medications?
- Biologics ineffective for symptoms
- Growth/nutritional issues
- Steroid dependency

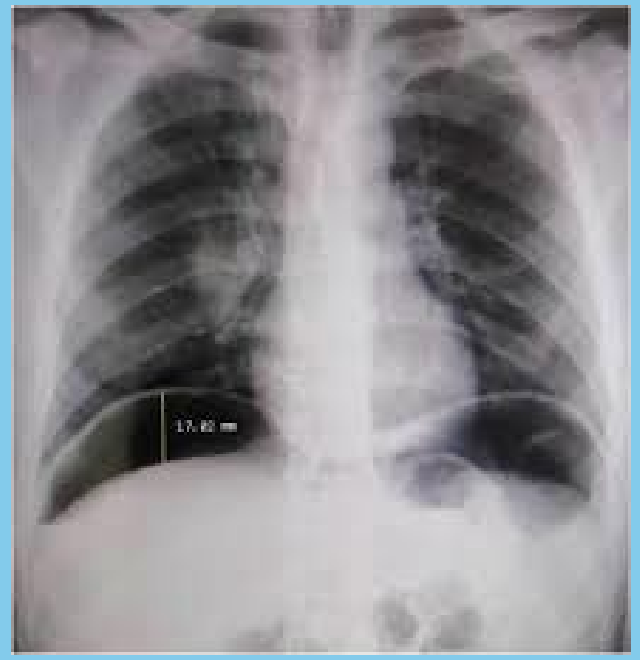
Bowel Obstruction

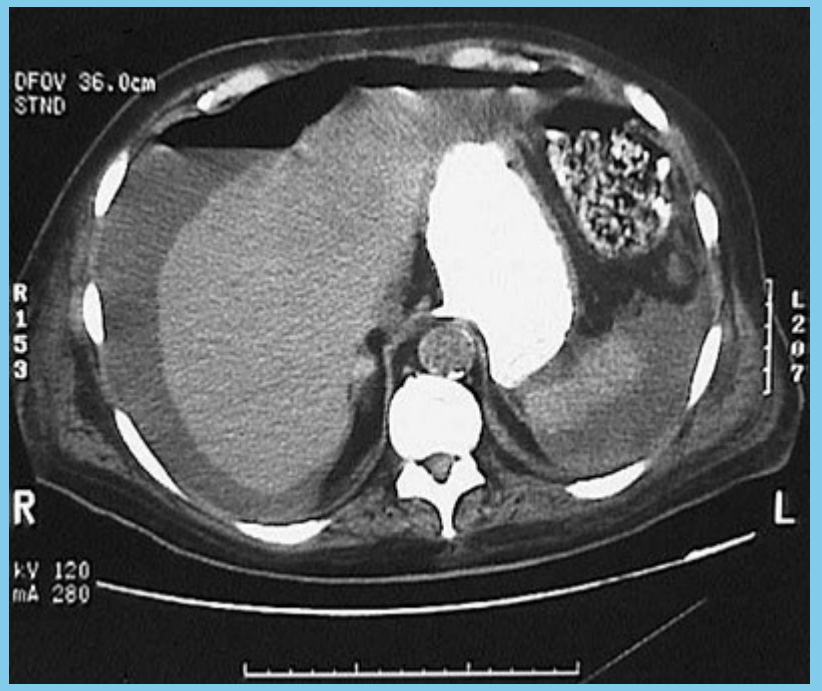
- Acute vs “chronic” stricture
  - CT vs MR enterography
  - Steroids vs surgical management …



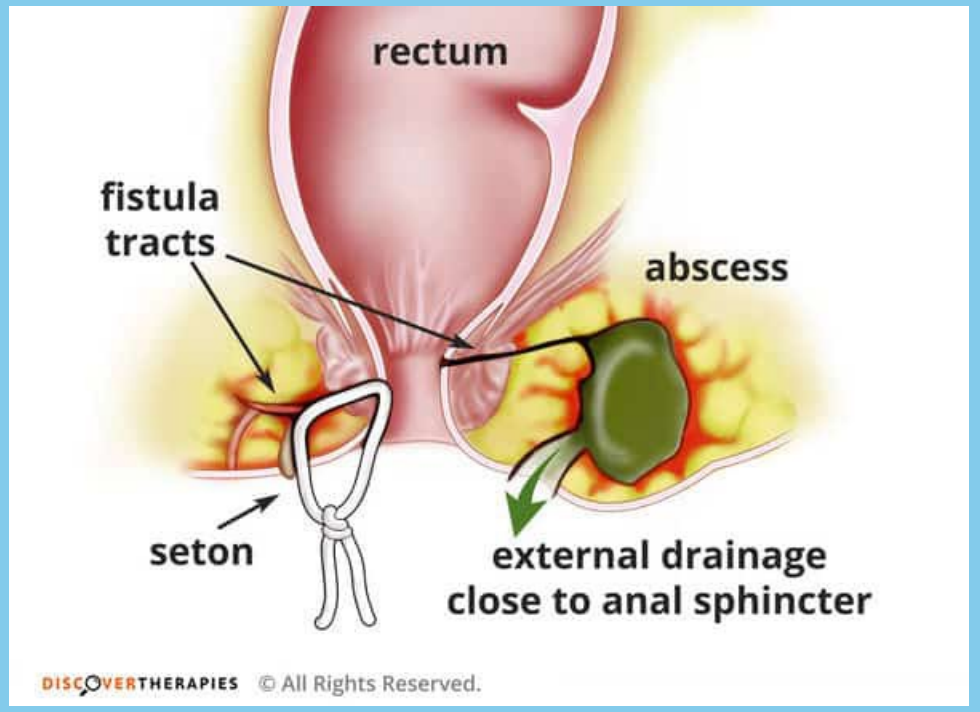
“Travelling with Crohn’s Disease | IBD Passport.” *Www.ibdpassport.com*, www.ibdpassport.com/en-nz/travelling-ibd/travelling-crohns-disease.

Free Perforation





Ischiorectal abscess/fistula



Abscess/fistula/phlegmon

- Begin with resuscitation (IV fluids/abx and steroids if appropriate)
- Most patients will require surgical management … hopefully as an elective procedure

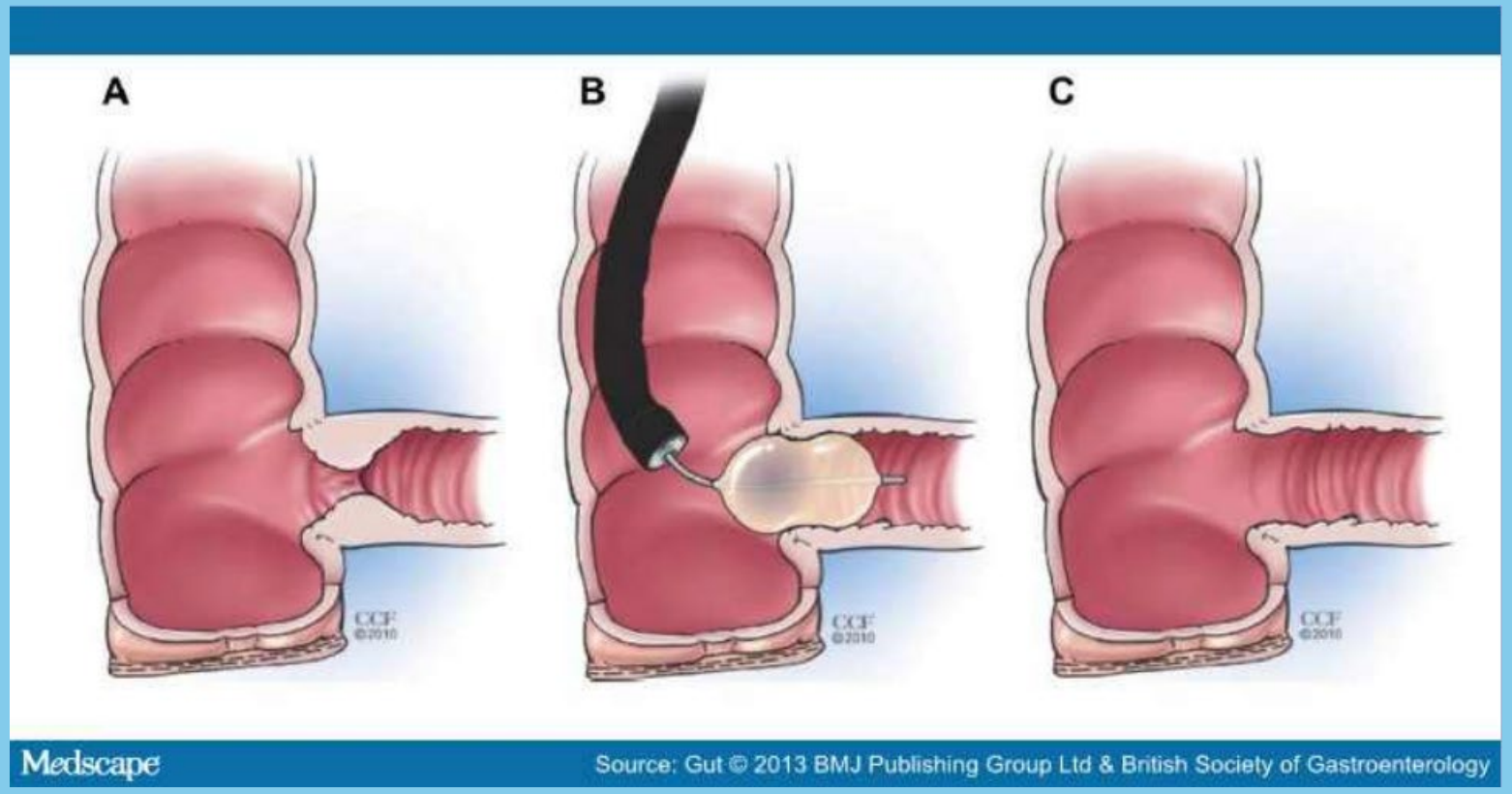
- Abscess drainage pre op will help decrease septic related complication in the post op period

Malignancy/Colitis/Bleeding

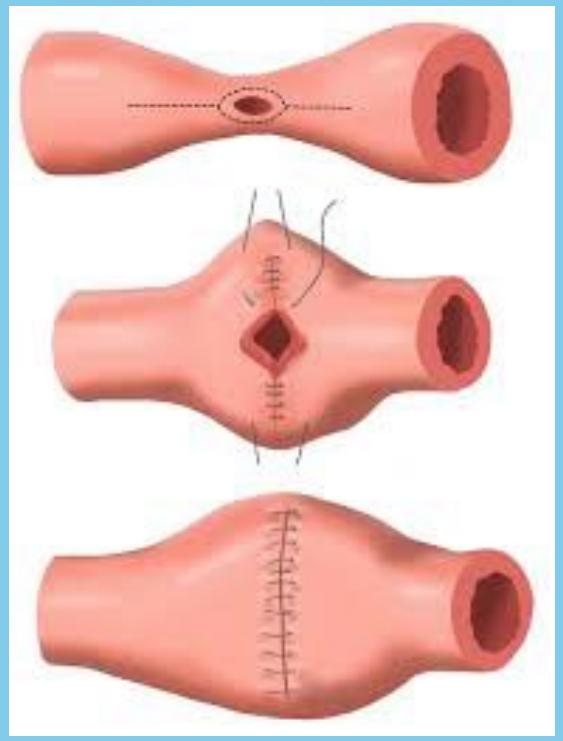
- Patients with CD have an increased risk of malignancy
  - Increase with time from diagnosis

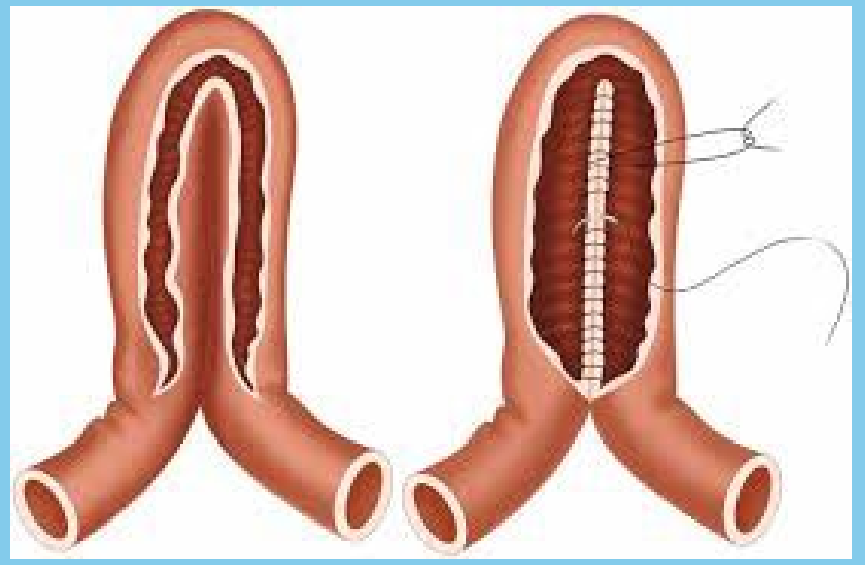
- Colitis and bleeding treated on severity of disease

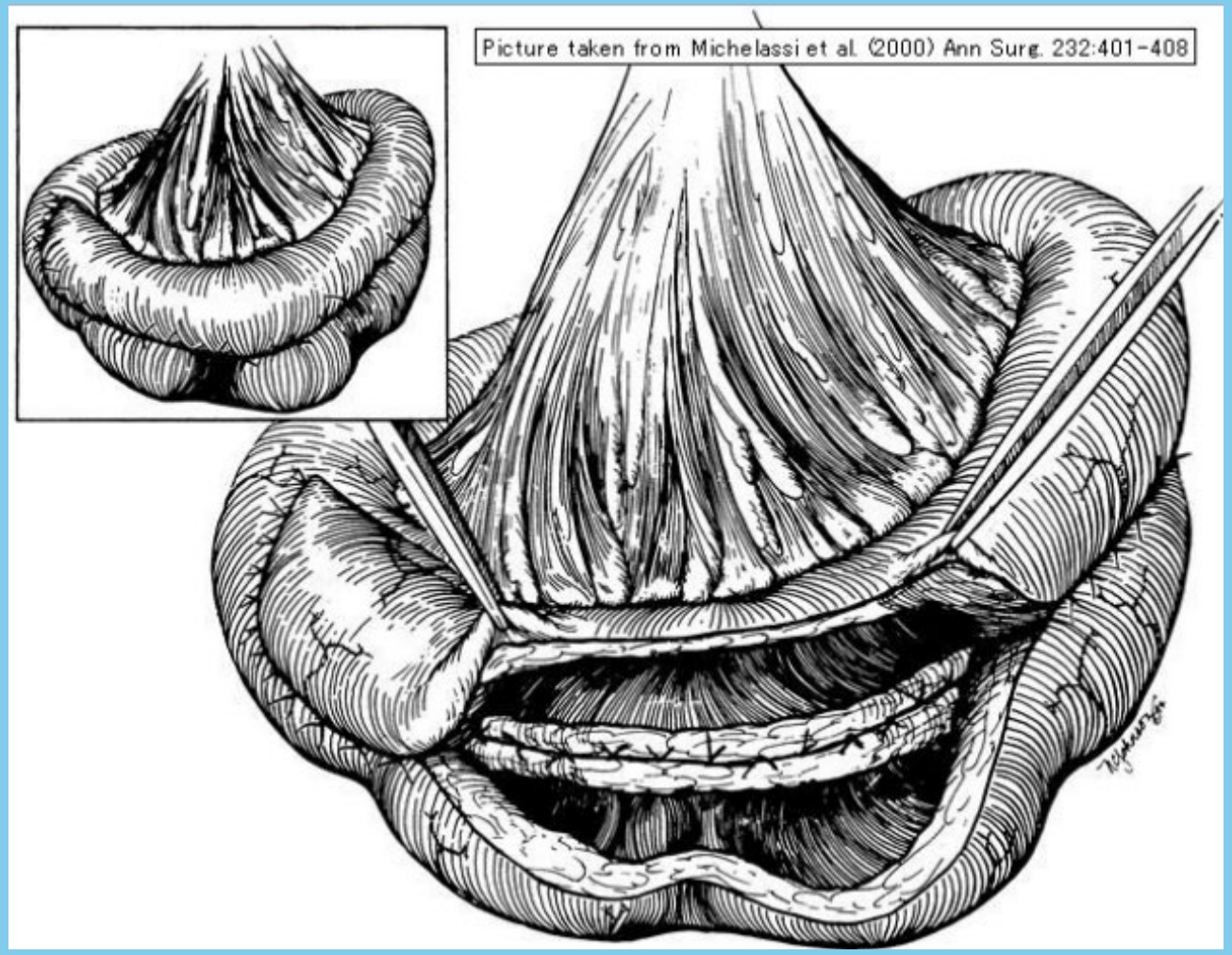
Ballon Dilation



Stricturoplasty






Picture taken from Michelassi et al. (2000) Ann Surg. 232:401-408

- Stricturoplasty
  - Good for conserving bowel length
  - Areas still require endoscopic surveillance
  - 5 year recurrence: 28%
    - (3% site specific recurrence)

  - Choice of operation?
    - “Non conventional” not inferior to “conventional” types

Yamamoto T, Fazio VW, Tekkis PP. Safety and efficacy of strictureplasty for Crohn's disease: a systematic review and meta-analysis. Dis Colon Rectum. 2007;50(11):1968-1986.
Campbell L, Ambe R, Weaver J, Marcus SM, Cagir B. Comparison of conventional and nonconventional strictureplasties in Crohn's disease: a systematic review and meta-analysis. Dis Colon Rectum. 2012;55(6):714-726.

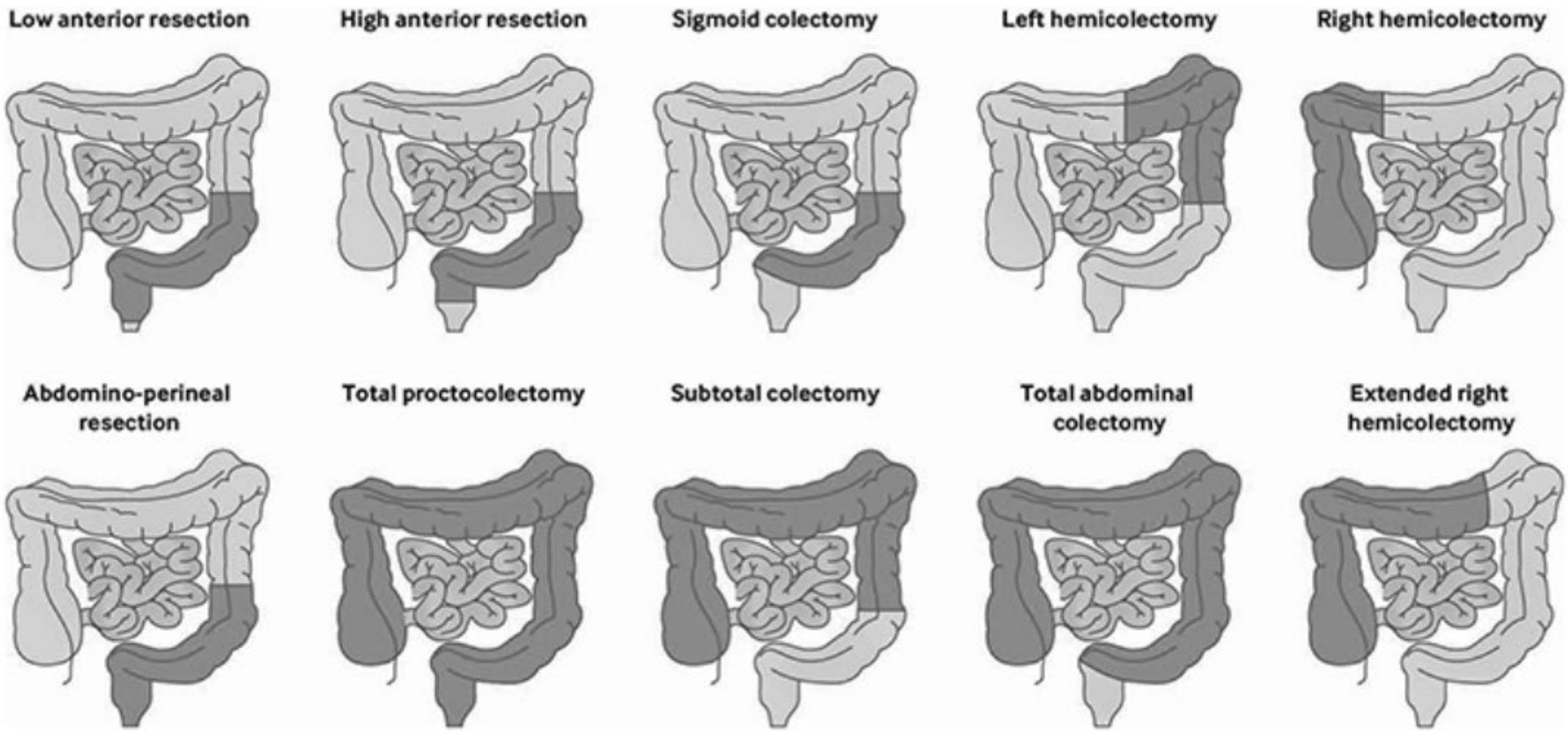
Operative intervention - resection

- Ileal or ileocolonic disease
  - Right hemicolectomy vs. SB resection

- Colonic Disease
  - Segmental resection vs. formal bowel resection
  - Ostomy vs. ileorectal anastomosis

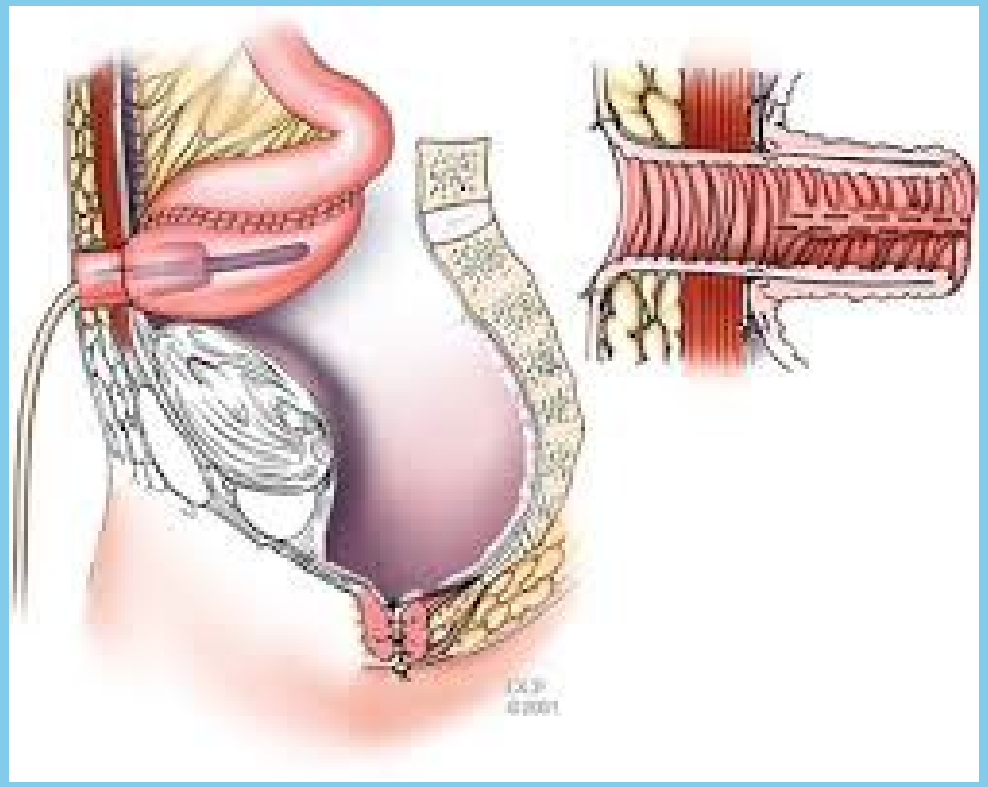
Operative intervention – resection

- Rectal Disease
  - Proctocolectomy vs. total proctocolectomy
  - End ileostomy vs. Pouch (IPAA)
  - Kock Pouch



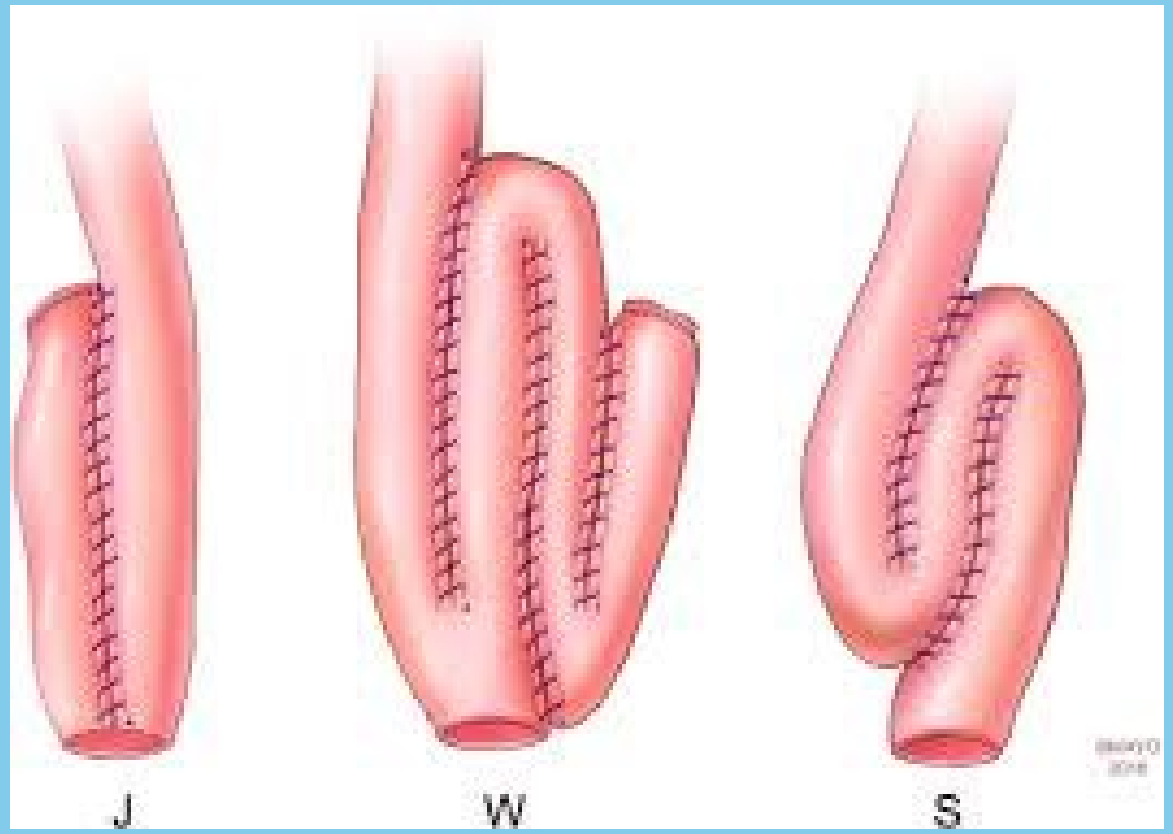
https://www.drdannyshouhed.com/colectomy

Kock pouch



vNg, Kheng-Seong, et al. “Ileal-Anal Pouches: A Review of Its History, Indications, and Complications.” *World Journal of Gastroenterology*, U.S. National Library of Medicine, 21 Aug. 2019, pmc.ncbi.nlm.nih.gov/articles/PMC6710180/.

Pouch Reconstruction



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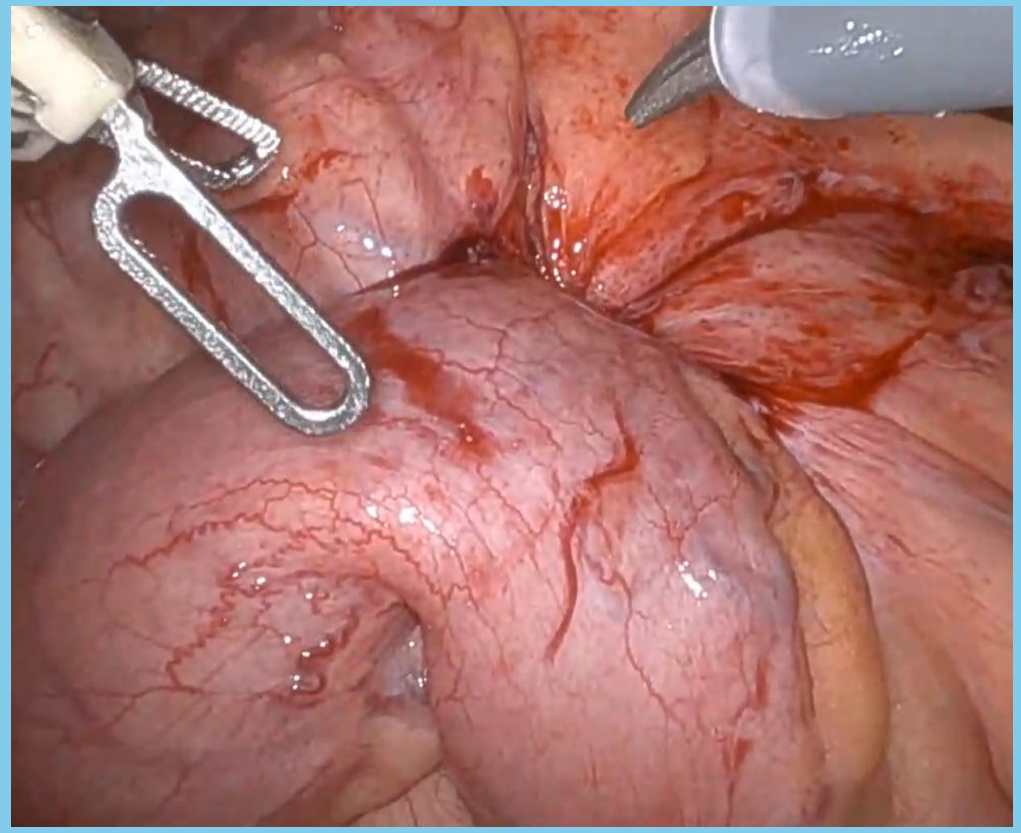
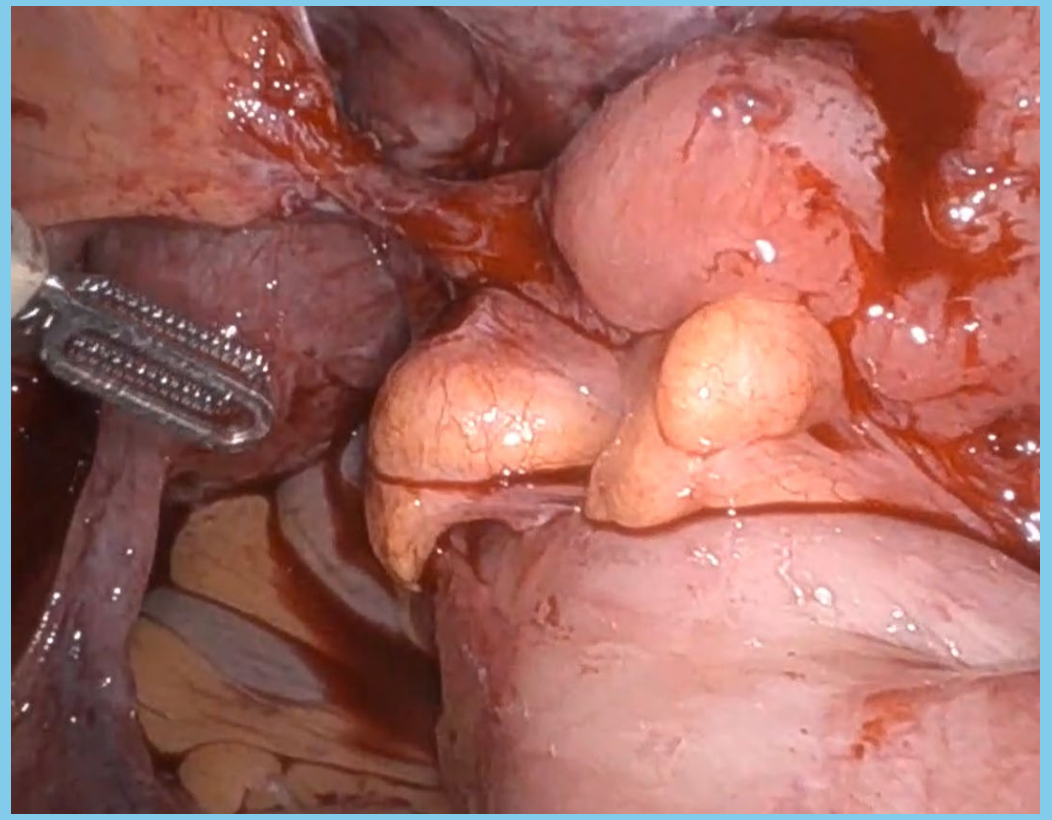
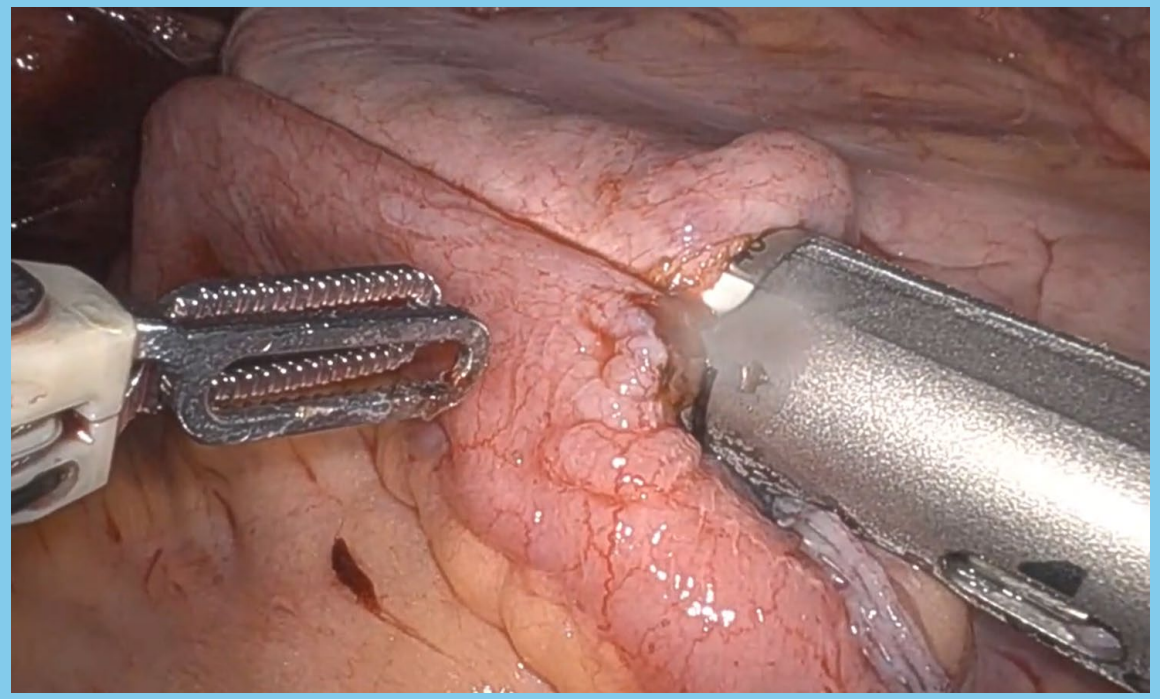
Method of Surgery

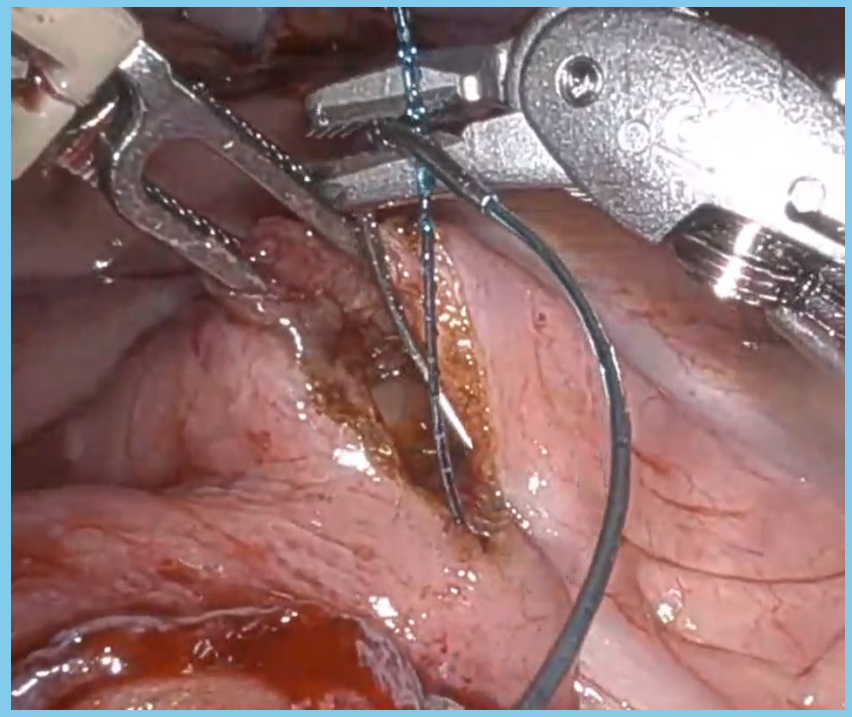
- Open -> **laparoscopic** -> robotic
  - Robotic surgery has seen increased utilization across all surgical fields
  - Comparable LOS, conversion rate, leak rate, readmission
  - Surgical time shorter in laparoscopy

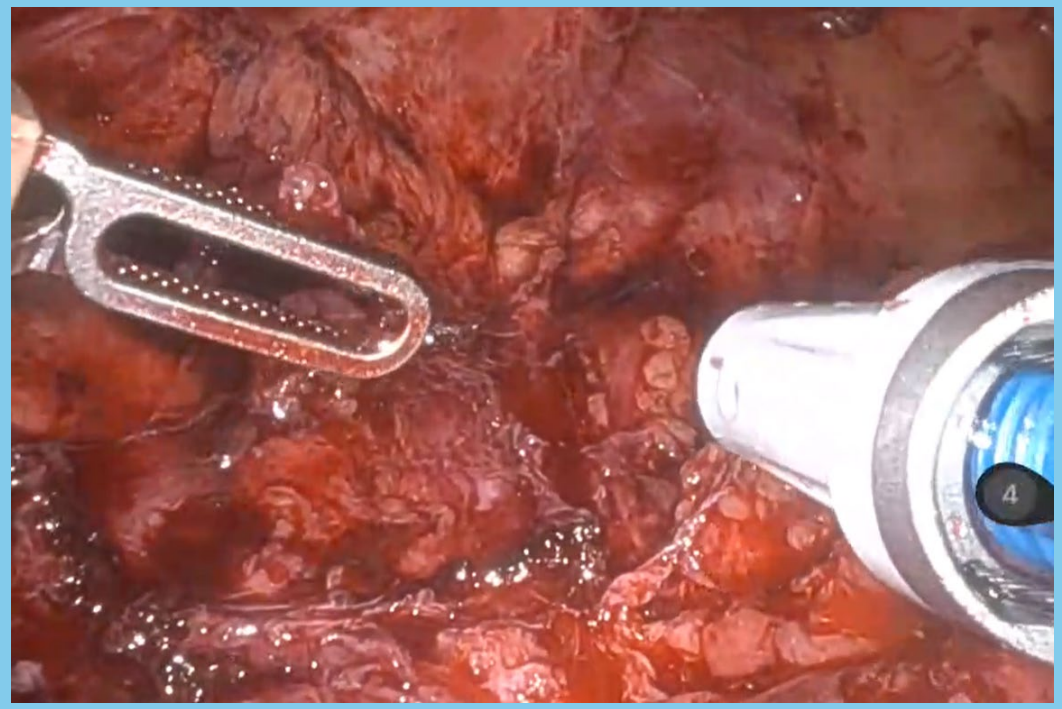
Ferrari L, Nicolaou S, Adams K. Implementation of a robotic surgical practice in inflammatory bowel disease. J Robot Surg. 2024 Jan 28;18(1):57. doi: 10.1007/s11701-023-01750-4. PMID: 38281204.
Shafquat Zaman, Ali Yasen Y Mohamedahmed, Widad Abdelrahman, Hashim E Abdalla, Ali Ahmed Wuheb, Mohamed Talaat Issa, Nameer Faiz, Nuha A Yassin, Minimally Invasive Surgery for Inflammatory Bowel Disease: A Systematic Review and Meta-Analysis of Robotic Versus Laparoscopic Surgical Techniques, *Journal of Crohn's and Colitis*, Volume 18, Issue 8, August 2024, Pages 1342–1355, https://doi.org/10.1093/ecco-jcc/jjae037







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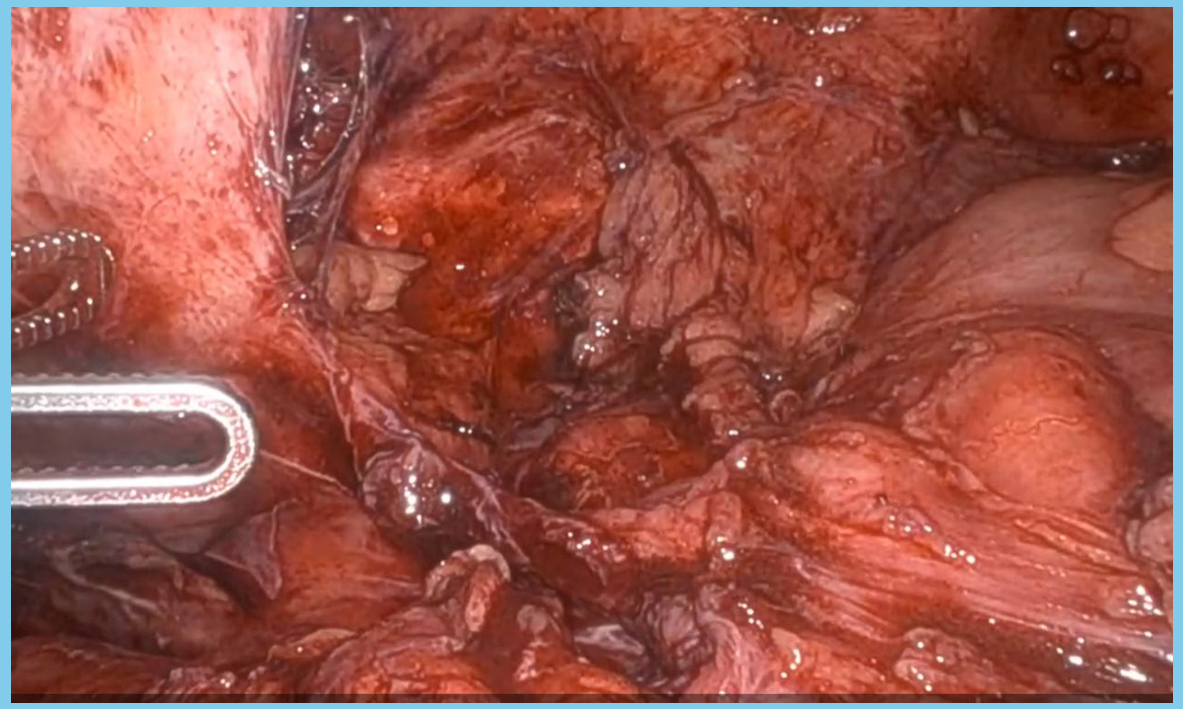

Questions?

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