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ARS QUESTION 1

Which of the following statements is TRUE:

A. Anal Transition Zone cancer surveillance is mandatory every year after pouch creation

B. ATZ <2cm with stapled anastomosis is related to better functional outcome vs mucosectomy and handsewn anastomosis

C. Risk of ATZ malignancy is 50% at 3 years after pouch placement

D. None of the above

IBDH

ARS QUESTION 2

Which of the following is TRUE regarding J pouch complications:

A. Crohn's disease complications usually appear >12 months after pouch surgery
B. Early pelvic sepsis is a high-risk factor for pouch failure
C. Redo pouch surgery can be successful for select patients with J pouch failure
D. All of the above

Present clinical case for session 2:

Clinical Case 2

20-year-old with UC with J pouch formation 15 months ago develops pre-sacral abscess and fistula tract. Pouchscopy and EUA shows a pouch anal stricture and multiple fistulous tracts. You are considering the next steps.

ADVANCES IN J-POUCH MANAGEMENT

Feza Remzi, MD, FACS, FTSS(Hon)
Professor of Surgery
Director, Inflammatory Bowel Disease Center
NYU Langone Health
NYU Grossman School of Medicine

No disclosures

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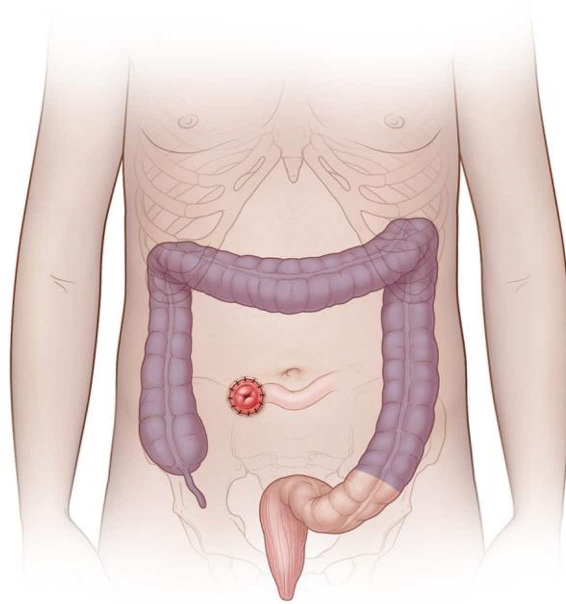
ADVANCES OR TRAPS?

Subtotal colectomy and end ileostomy



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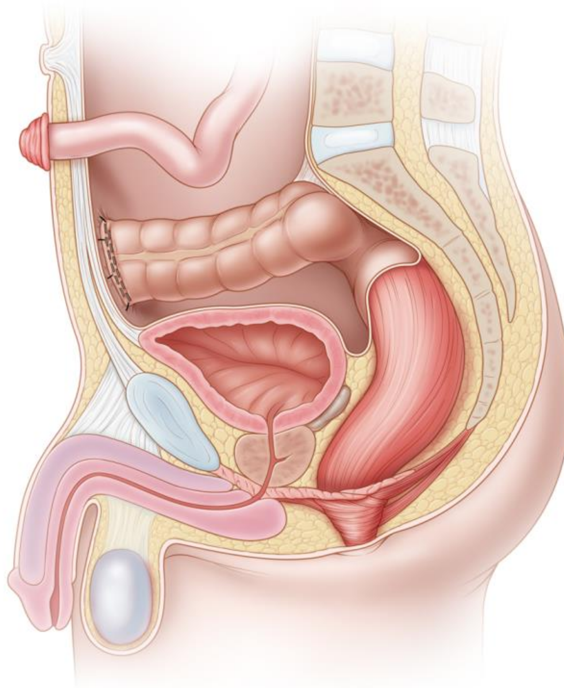
Rectal stump is attached to the fascia



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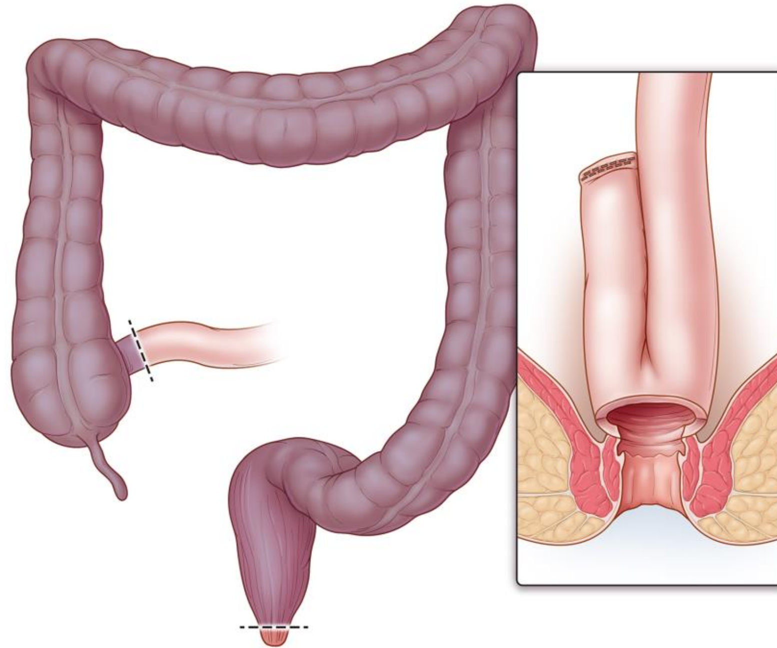
Restorative proctocolectomy with IPAA



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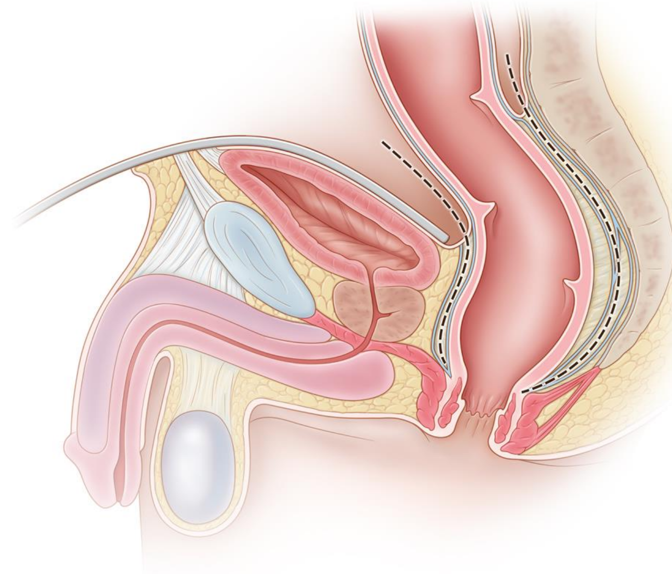
Dissection plan



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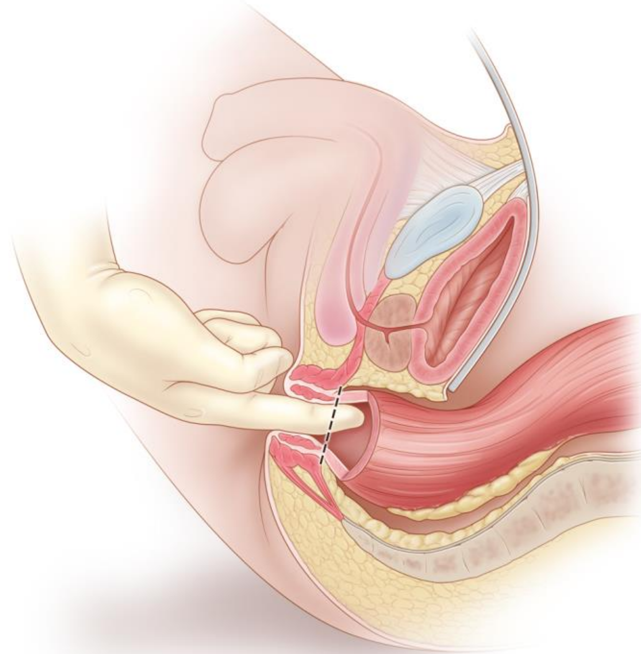
Digital exam during proctectomy



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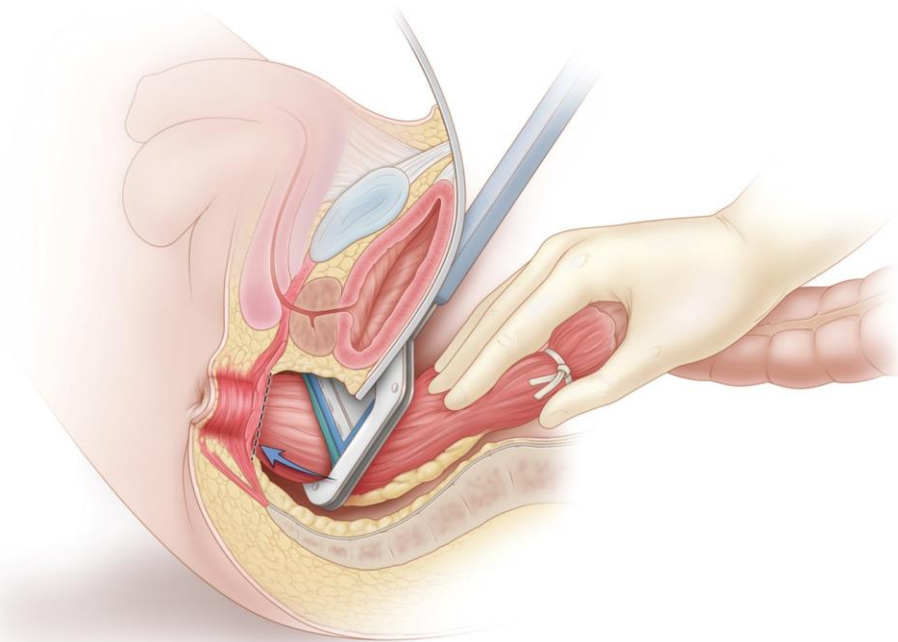

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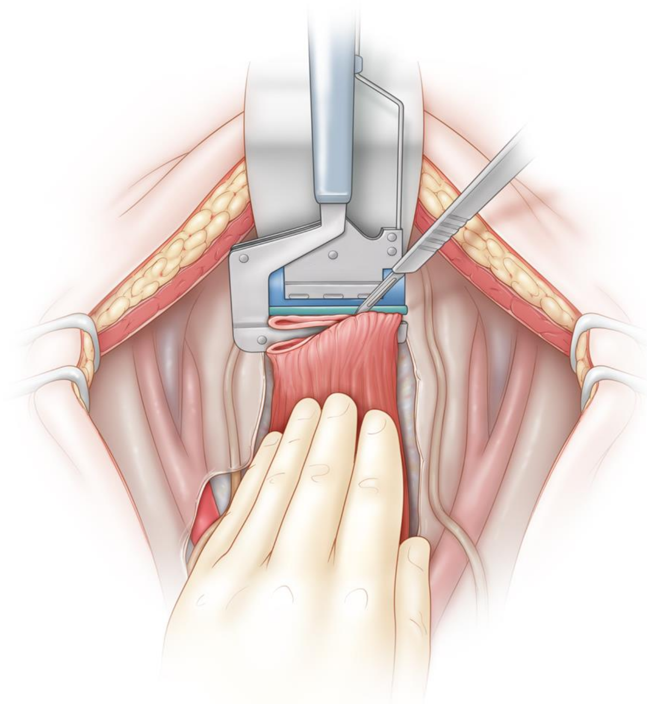

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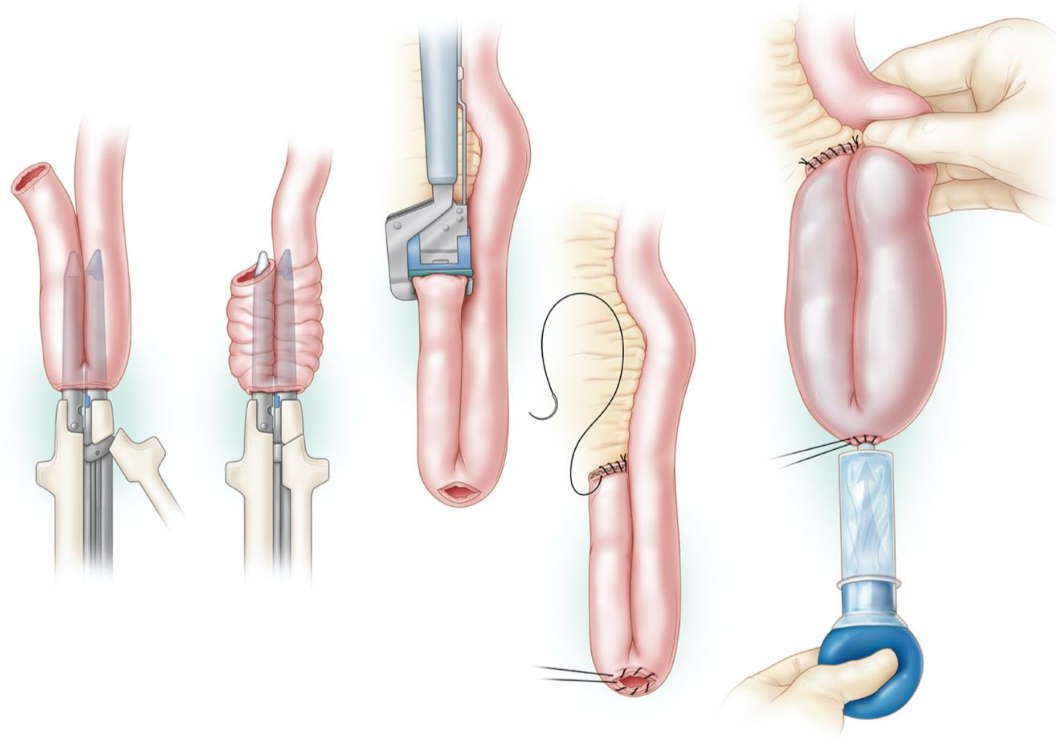
Creation of the ileal pouch and saline leak test



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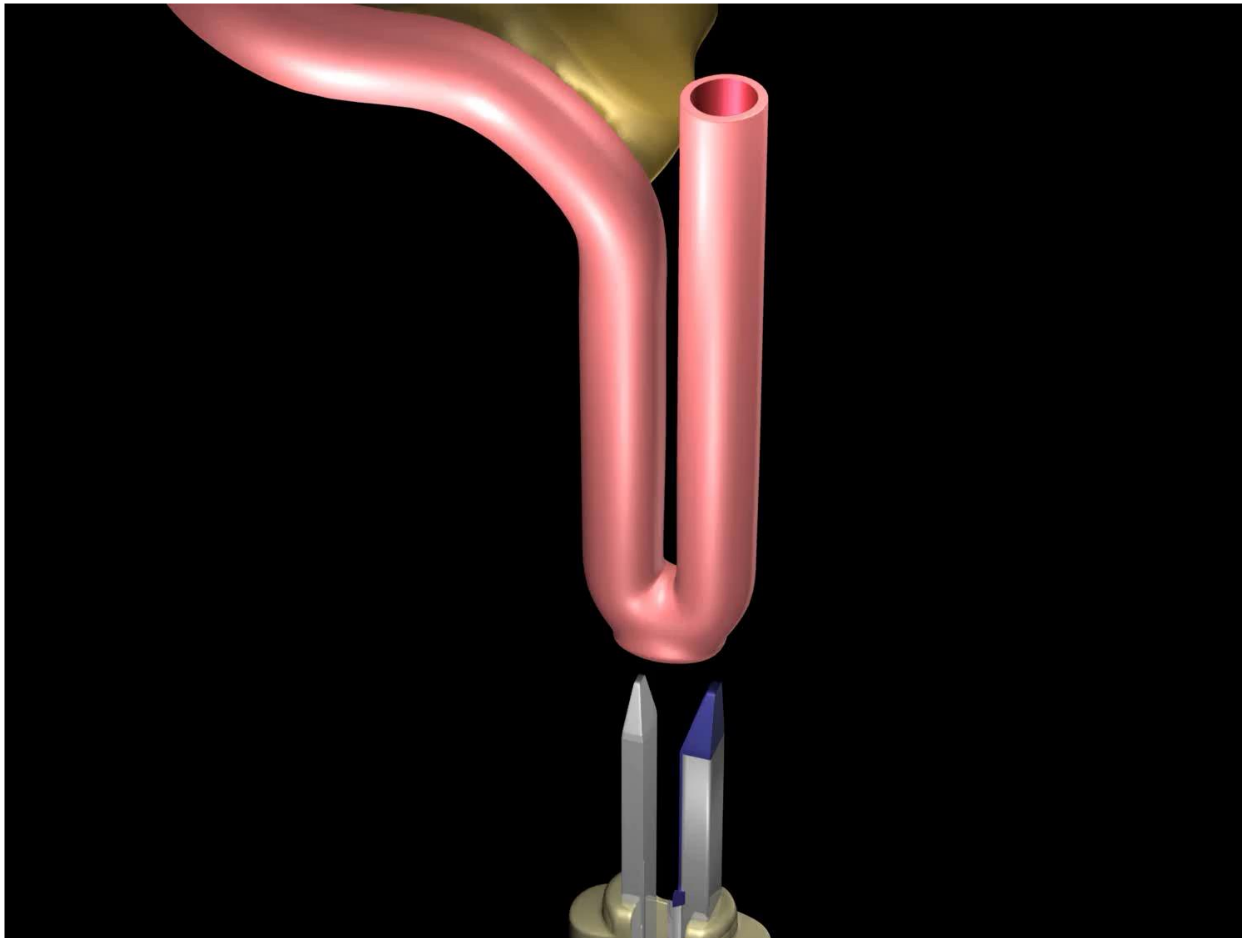

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Difficulty in reach

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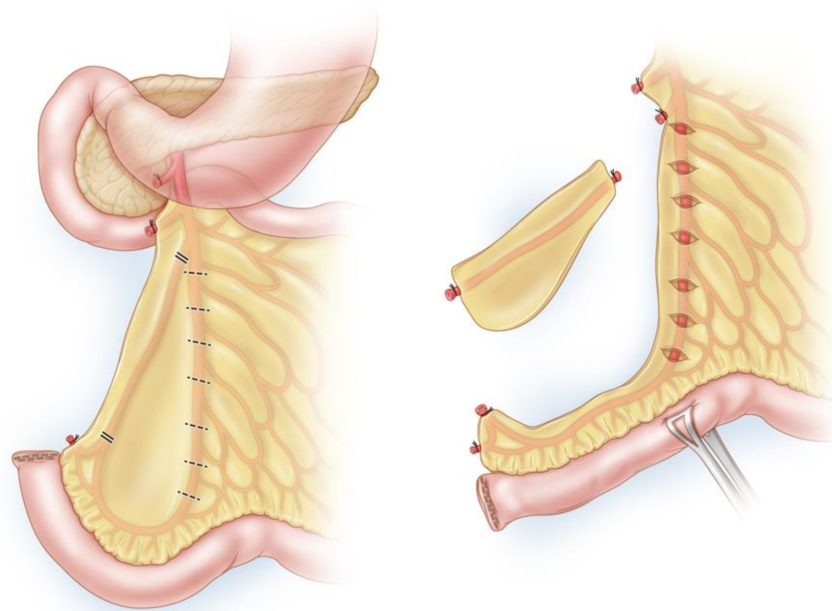
High ligation of the ileocolic artery and peritoneal incisions on the mesentery



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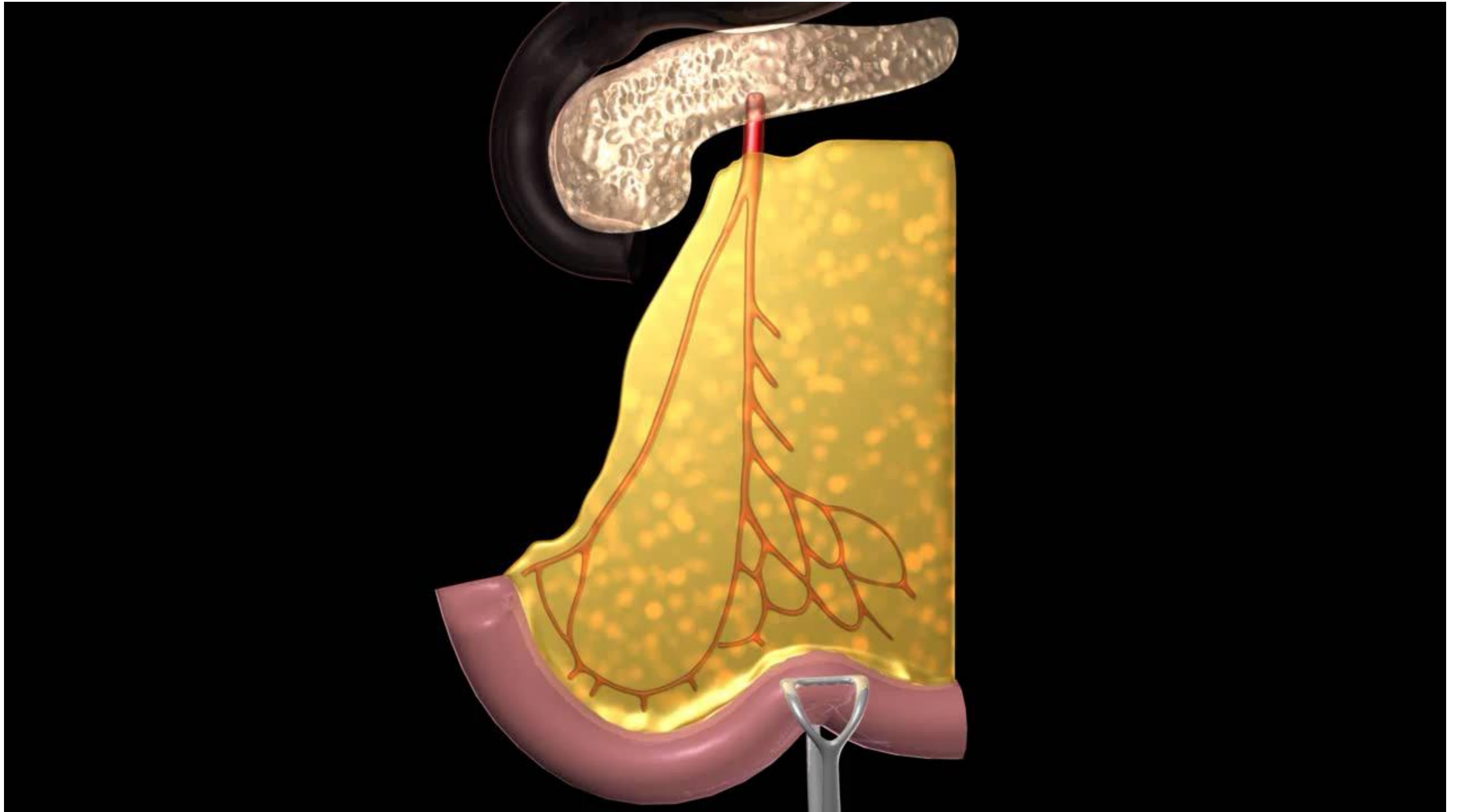

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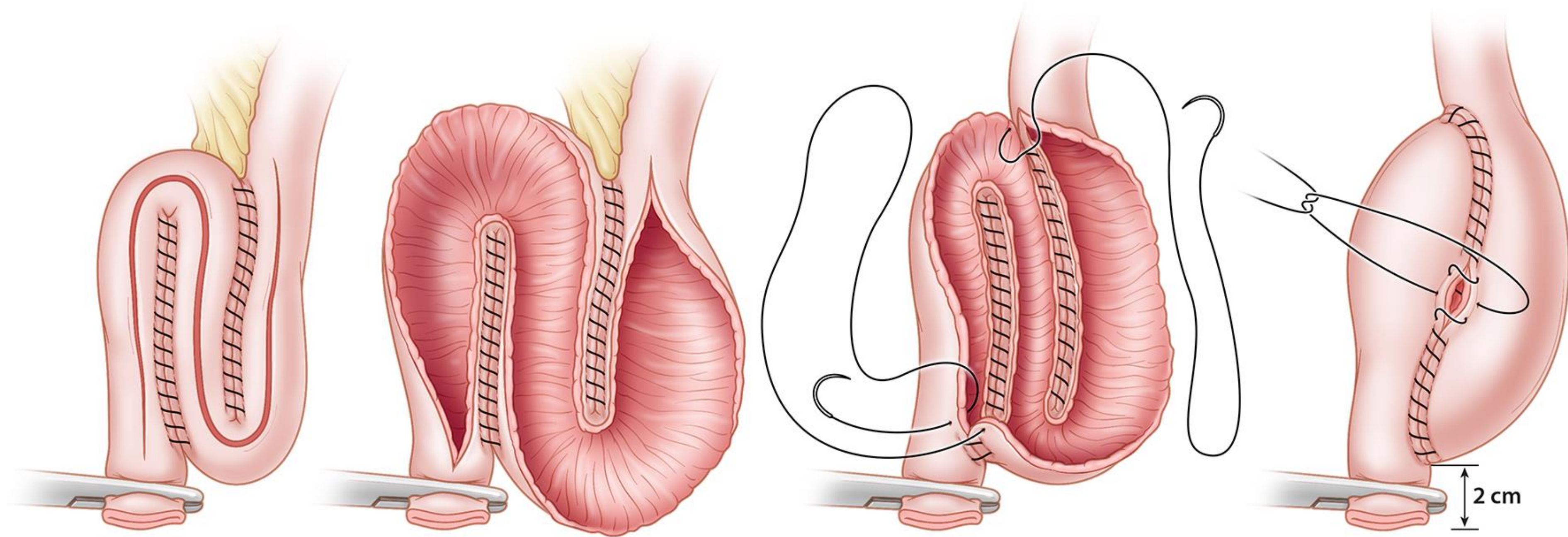
S pouch can provide additional 2-4 cm reach



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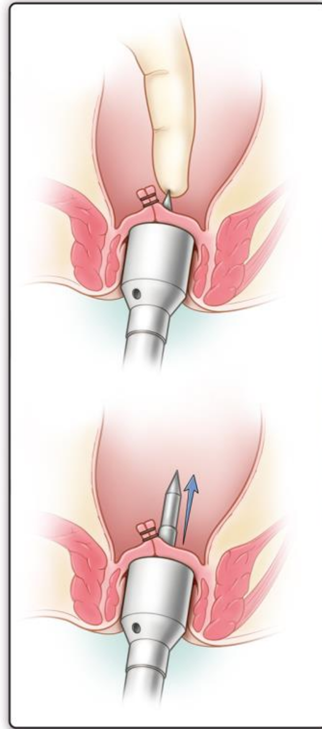
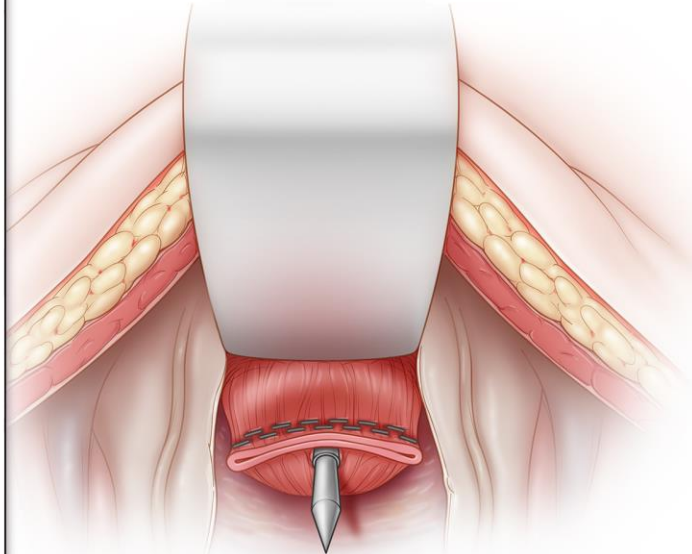
Double stapled pouch anal anastomosis





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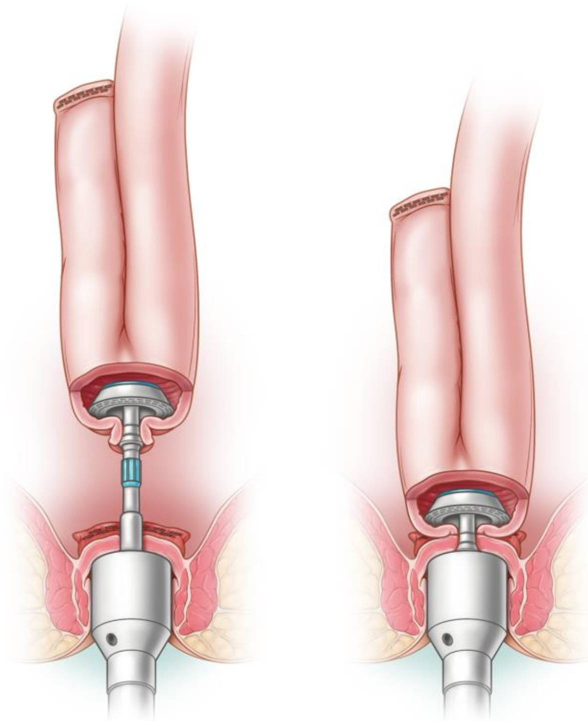

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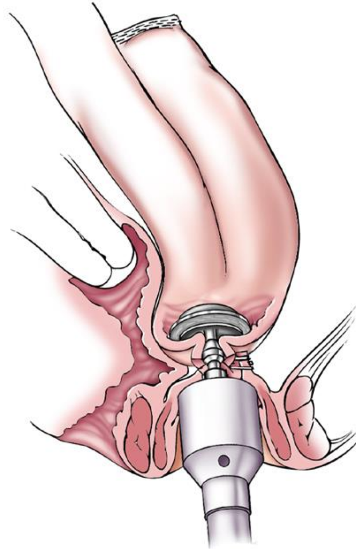
Caution not to create vaginal fistula



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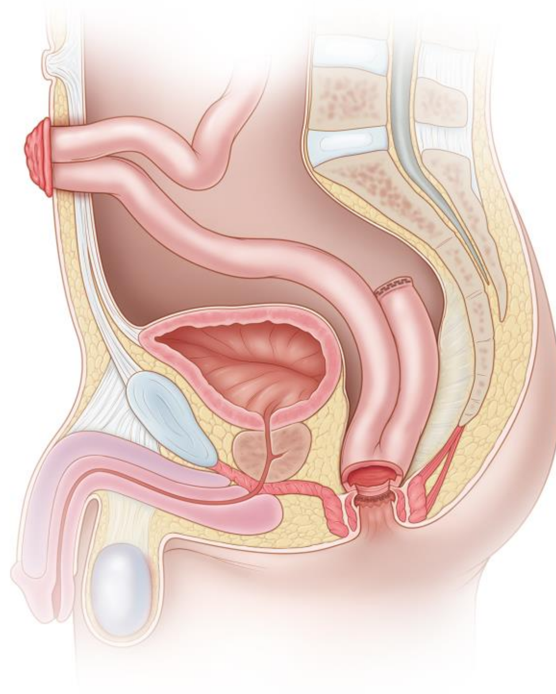
Anatomy after IPAA



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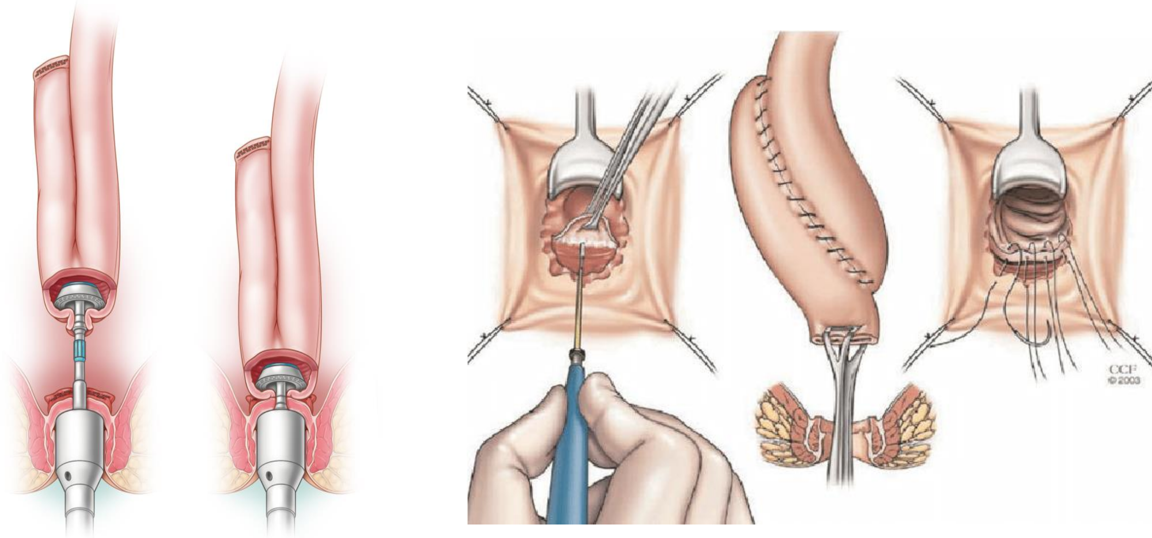
Stapled or Handsewn anastomosis



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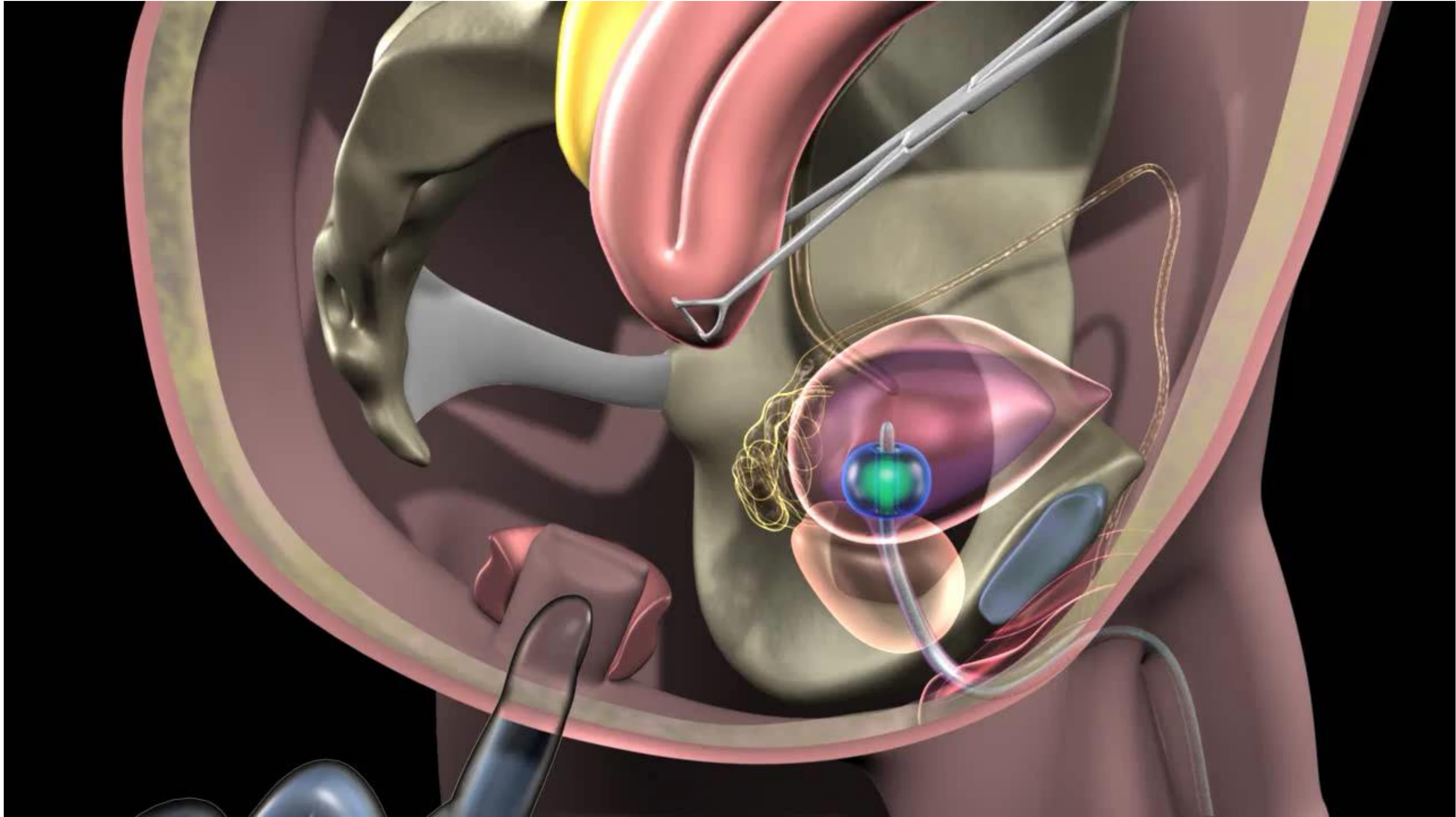

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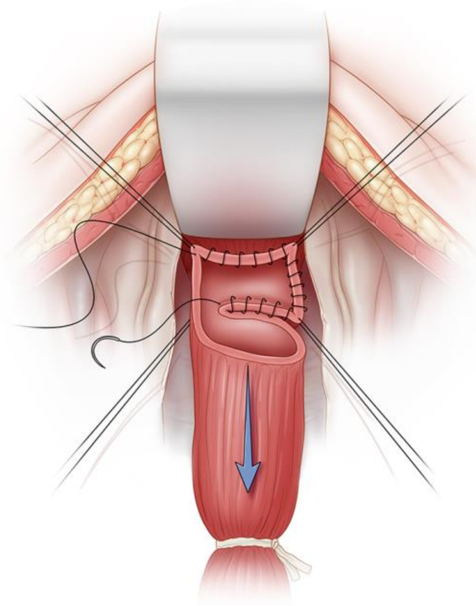
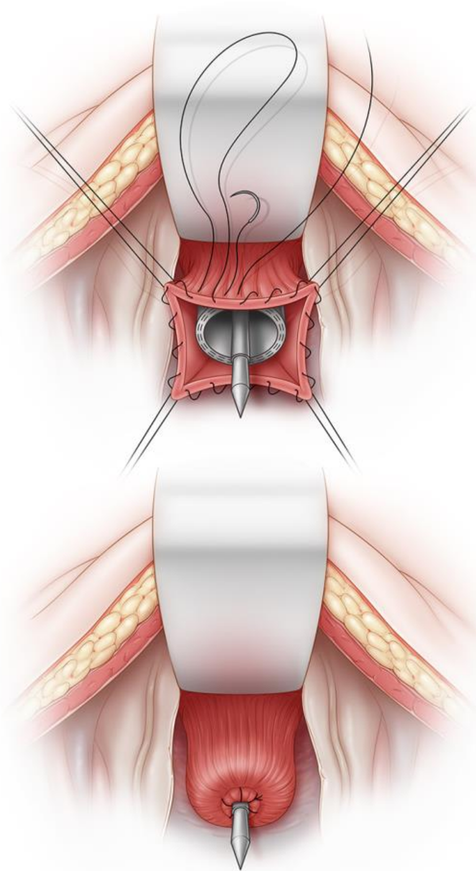

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ECCO Guidelines on Surgery for UC (2021)

- IPAA may be constructed using either a stapled or handsewn technique, with comparable functional outcomes. Thus, the type of anastomosis should be left to the surgeon's discretion

Spinelli et al., 2021, Journal of Crohn's and Colitis

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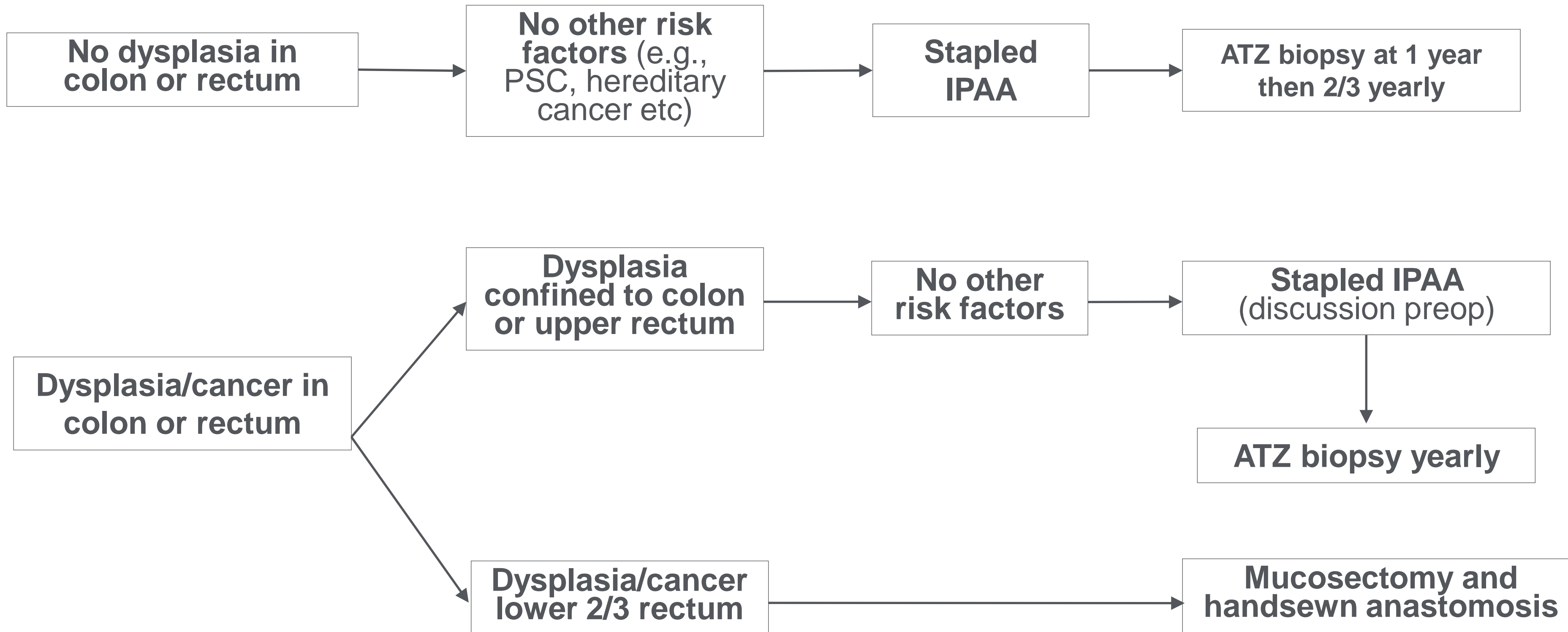
Stapler vs Mucosectomy

- Function
- CCF N >3000
- Patients functional outcome and QOL were evaluated at 1,3,5,10 years after their IPAA surgery
- No difference in QOL
- Nighttime BM,daily and nocturnal seepage and pad usage and incontinens were better in stapled group
- Septic Complications were less in stapled group

Kirat et al., 2009, Surgery

Stapled vs handsewn anastomosis during IPAA



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ECCO Guidelines on Surgery for UC (2021)

- A modified 2-stage IPAA is associated with fewer septic and non-septic complications and with shorter hospital length of stay than 3-stage or 2-stage IPAA

Spinelli et al., 2021, Journal of Crohn’s and Colitis

ECCO Guidelines on Surgery for UC (2021)

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Spinelli et al., 2021, Journal of Crohn's and Colitis

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The Outcome After Restorative Proctocolectomy With or Without Defunctioning Ileostomy

Diseases of the Colon & Rectum

Feza H. Remzi, M.D.,[1] Victor W. Fazio, M.B., M.S., F.R.C.S.,[1] Emre Gorgun, M.D.,[1] Boon S. Ooi, M.D.,[1] Jeff Hammel, M.S.,[2] Miriam Preen, B.S.N., R.N.,[1] James M. Church, M.B., B.Ch.,[1] Khaled Madbouly, M.D.,[1] Ian C. Lavery, M.B.B.S.[1]

[1] *Department of Colorectal Surgery, Cleveland Clinic Foundation, Cleveland, Ohio*
[2] *Department of Biostatistics and Epidemiology, Cleveland Clinic Foundation, Cleveland, Ohio*

- Included 277 patients without ileostomy during IPAA
- Septic complications were similar compared to group with ileostomy
- Quality of life and functional outcomes were similar
- RP/IPAA can safely be performed without diverting ileostomy in **CAREFULLY SELECTED** patients

Remzi et al., Dis Colon Rectum, 2006

Selection criteria for avoidance of ileostomy

- Experienced surgeon
- Elective procedure
- Motivated patient
- Low-dose prednisone (<20 mg/day)
- No immune-modulating agents/ biologics
- Uneventful operation

Remzi et al. 2006, Dis Colon Rectum

MIS and IPAA

Just stick to the same principles

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Transanal ileal pouch

- Better visualization and access during pelvic dissection?
- Fewer staple firings
- Risk of anastomotic leak is similar compared to conventional technique
- Functional outcomes?

Park et al. ASCRS 2021; Park et al. JLAST 2021

Transanal ileal pouch

- Better visualization an s du vic dissection?
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- Risk of anastomotic le red to conventional technique
- Functional outcomes?

Park et al. ASCRS 2021; Park et al. JLAST 2021

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Transanal transection single-stapled anastomosis (TTSS)

- Precise distal transection and a single-stapled double purse-string anastomosis
- Proof of concept study showed promising outcomes during IPAA (in 7 patients)
- Larger studies needed

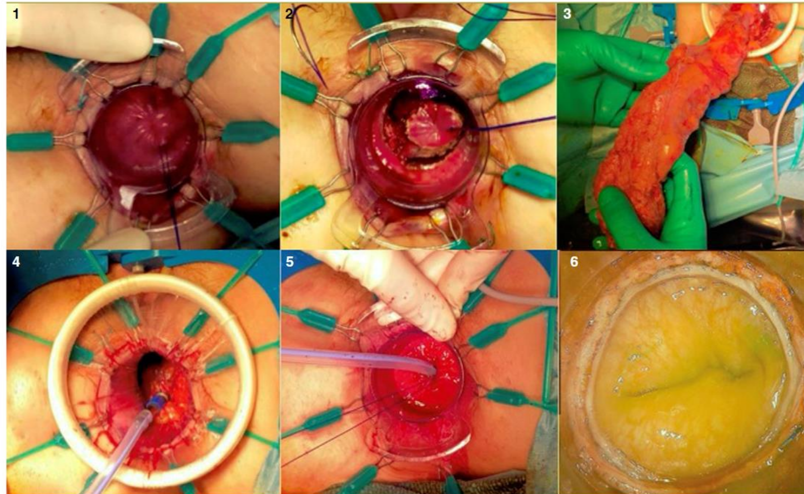

Figure 1. Procedural steps: 1, transanal pursestring; 2, full-thickness, circumferential rectotomy; 3, bowel extraction; 4, insertion of a circular stapler anvil, with a tubular drain on its tip; 5, pursestrings placed at the distal rectal cuff; 6, anastomosis perfusion assessment by ICG FA.

Spinelli et al. 2019, Colorectal Disease

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Reoperative pouch surgery

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Remzi Principle 1

“ When one can live happily & good quality of life with a stoma, trying to convince them for a re-do pouch surgery is a great disservice “

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Remzi Principle 2

" When one cannot live happily & good quality of life with a stoma, trying to convince them for a pouch excision is a great disservice "

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Principles of re-operative pouch surgery

- Humility
- Teamwork; surgeon, gastroenterologist, radiologist, pathologist, PAs, NPs, WOCN and floor nursing
- Respect
  - Patient
  - Pathology; unpredictability
  - OR staff
- Strategize
- Repetition is the mother of skills
- This is a surgery needs to be done in teams' practices that does it everyday as a group

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General Principles

- Re-evaluate for technical failure
- “CHECK YOUR Own or OTHERS’ FOOT STEPS”
- Did patient have a perioperative septic complication?
- When did the issues with pouch start?
- 6 months to one year after surgery is high likely technical
- Work-up: GGE, Pelvic MRI, EUA & flexible pouchoscopy

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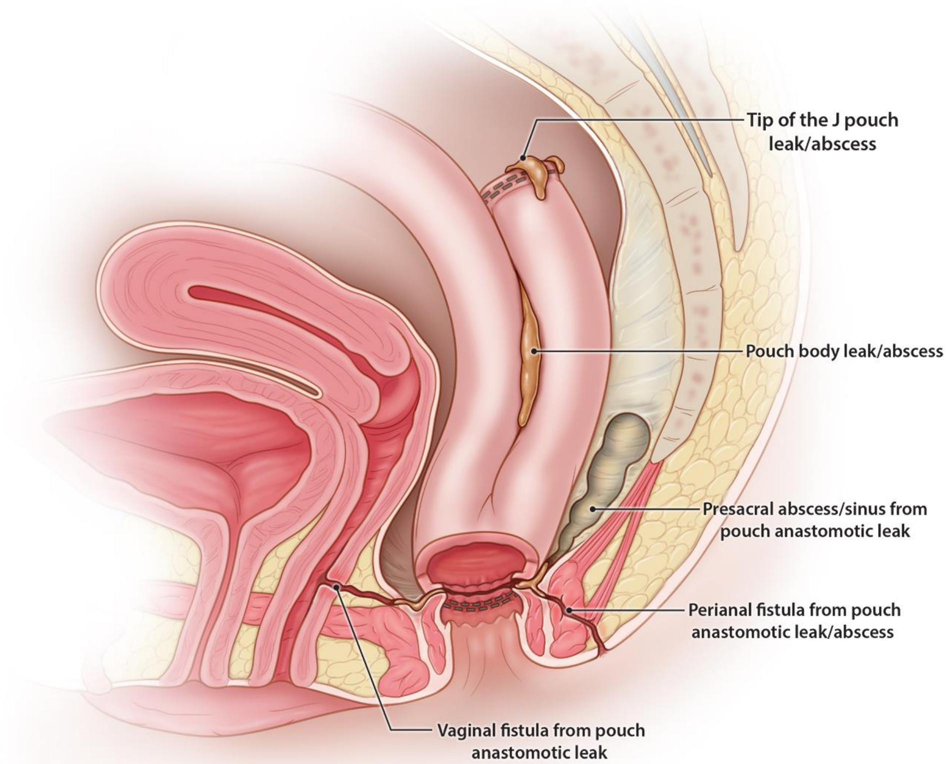

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Structured Reporting of Pelvic MRI for J Pouch Evaluation NYU Langone Health Template

FINDINGS:

Anastomosis/suture line assessment:

IPAA anastomosis: Anastomosis
Tip of J suture line: Suture Line
Pouch body anastomosis: Pouch Body

Rectal cuff/Anal Transitional zone (ATZ):

Length (if ring shaped staple line at IPAA seen): lengthLength:cm/Unable to determine cuff length.
Cuffitis: Cuffitis:Yes./No.

Pouch body:

Size: Size:Normal./Dilated./Small.
Pouchitis: Pouchitis:No./Yes.
Stricture:Stricture:No./If yes, describe location of stricture within the pouch (proximal, mid or distal).

Pouch inlet/outlet:

Pouch inlet and pre-pouch ileum: inlet
Pouch outlet stricture: Stricture:Yes/No

Peripouch Mesentery:

Position of mesentery relative to pouch: Position of mesentery:Anterior/Posterior/Right Lateral/Left Lateral
Mesentery vessel twist: Twist:Yes/No

Pelvic abscess or perianal fistula *NOT* related to anastomosis or suture line: Other:None./Yes. Describe

Pelvic Lymph Nodes: Field 10:.../No lymphadenopathy./No enlarged lymph nodes.

Skeletal: Field 15:.../No aggressive lesions./Degenerative changes in the spine. No aggressive lesion.

Other Findings: Other findings

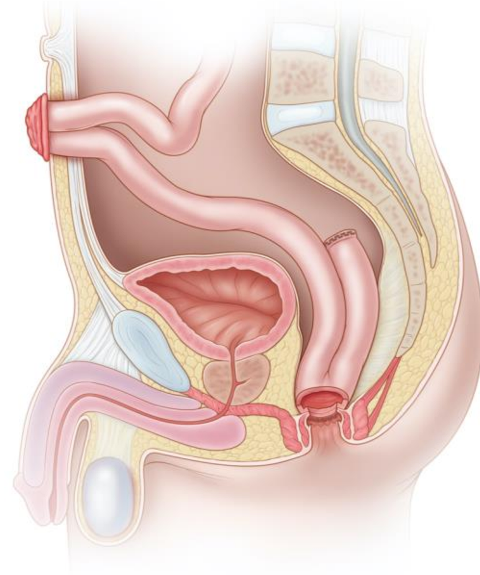
18 key features required for complete J pouch assessment

- Anastomosis (IPAA, tip of J, pouch body)
- Cuff (length, cuffitis)
- Pouch body (size, pouchitis, stricture)
- Pouch inlet/pre-pouch ileum (stricture, inflammation, sharp angulation)
- Pouch outlet (stricture)
- Peripouch mesentery (position, mesentery twist)
- Pelvic abscess
- Peri-anal fistula
- Pelvic lymph nodes
- Skeletal abnormalities

Huang, Remzi et al. AJR, 2021

“Thoughtful” ileostomy

- Loop ileostomy approximately 20 cm upstream of pouch
- Facilitates creation of new pouch (if needed) in future
- Can be performed laparoscopically more than 50% of the cases



Schwartzberg et al., 2019, Dis Colon Rectum

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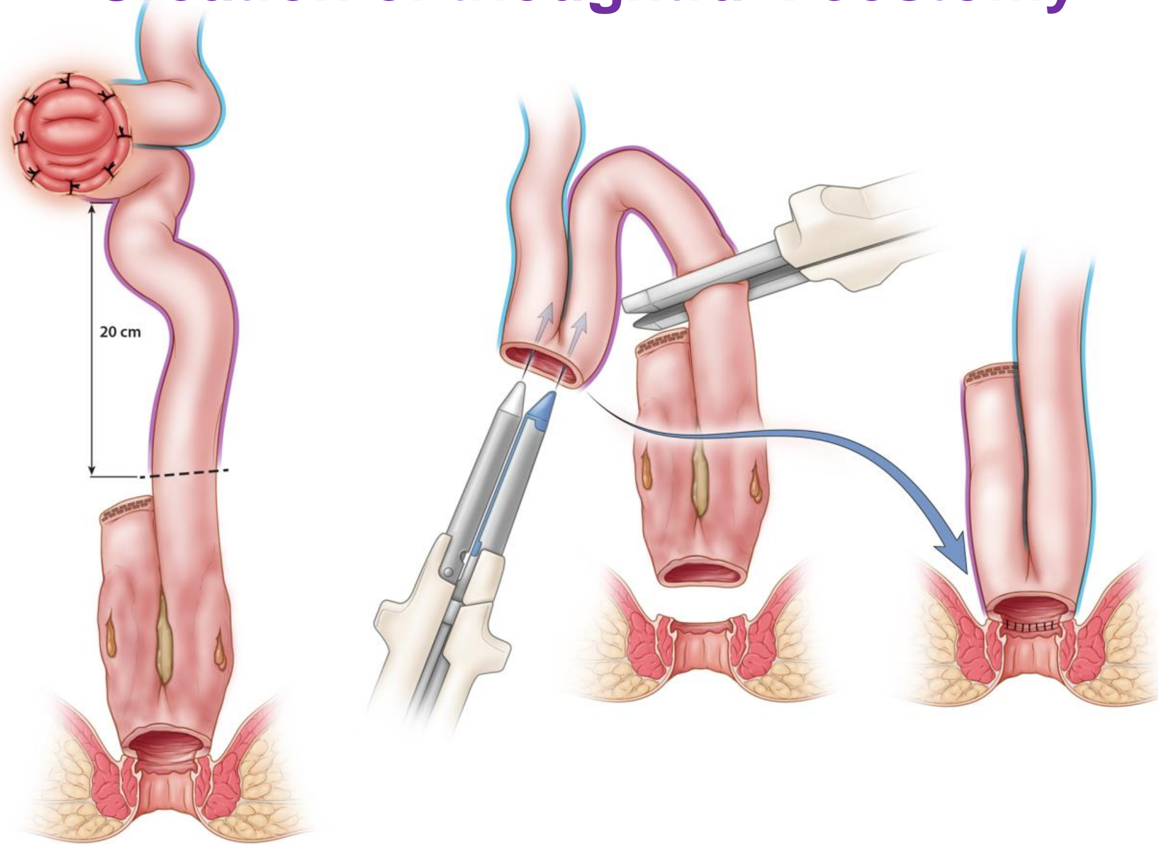
Creation of thoughtful ileostomy

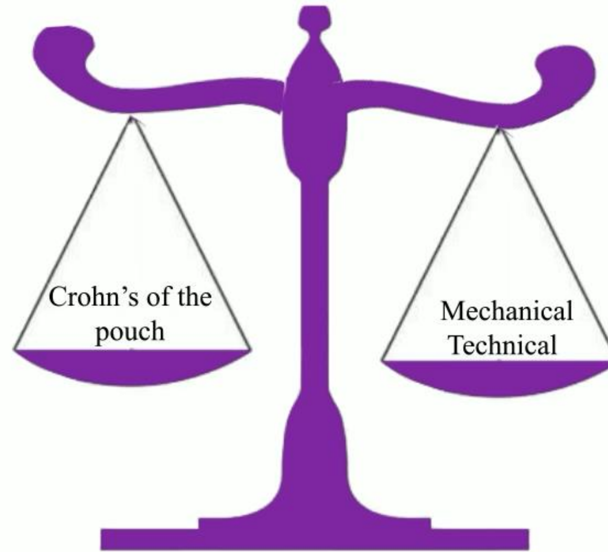


Mechanical findings in patients with pouch failure who were referred to as Crohn's of the pouch

- 77 patients had re-do IPAA between 9/2016 – 10/2018
- 68% of the patients were labeled and referred to as CD of the pouch
- The majority of the patients had more than one indication requiring re-do IPAA: Pelvic sepsis, long rectal cuff, strictures, twist, cuffitis/pouchitis
- Re-do IPAA was successful in 85% of the patients
- Only 4 (10%) patients had CD of the pouch postoperatively (pathologic or clinical diagnosis)

Esen et al., DDW 2019

Mechanical vs Crohn's of the pouch?



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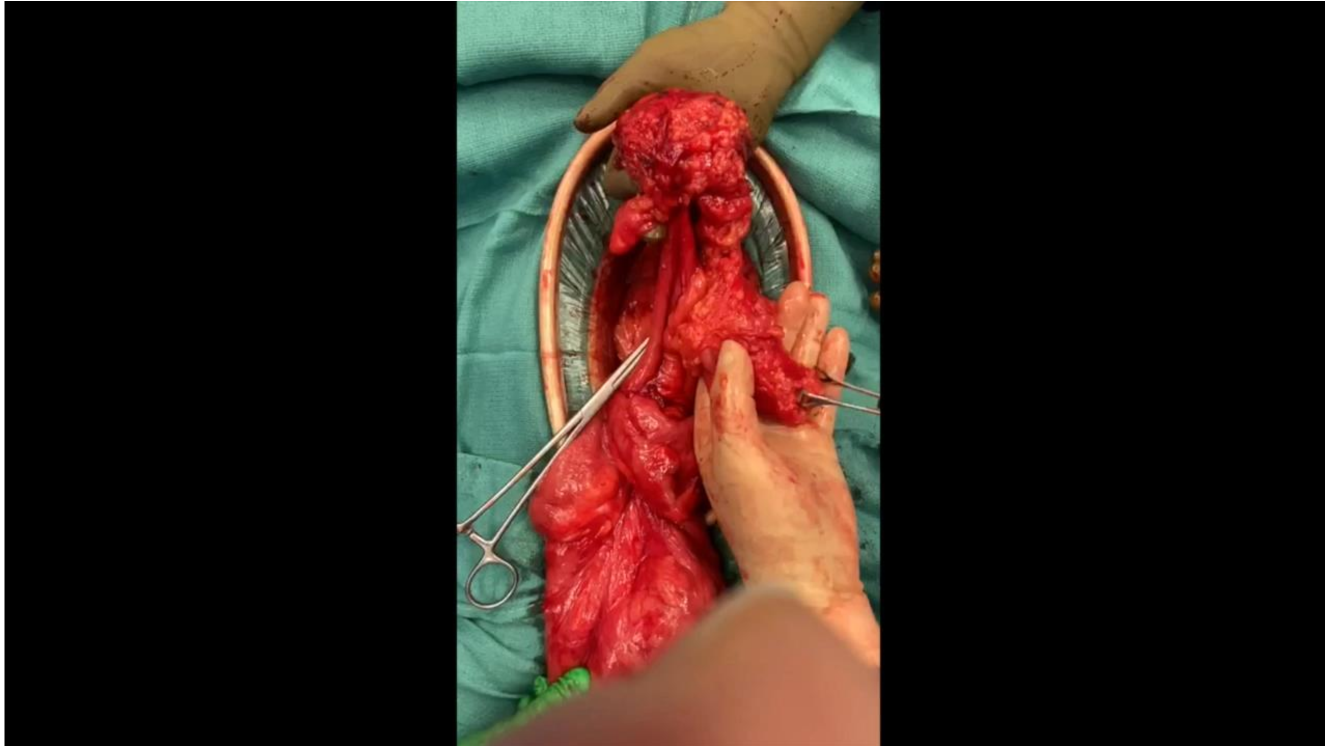
Long rectal cuff, mesorectum & pouch twist causing obstructive defecation



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Re-do IPAA vs primary IPAA

- 113 patients with re-do IPAA were compared with 121 patients with re-do IPAA
- Thirty-day morbidity was similar (Re-do: 51% vs Primary: 46%)
- Number of bowel movements, urgency, incontinence, pad use, seepage were more common after re-do IPAA
- Restrictions, QOL and patient happiness were similar
- Re-do IPAA is a patient driven procedure and associated with high QOL in motivated patients

Esen et al., 2021, Unpublished article

Pouch excision and creation of a new pouch vs salvaging the existing pouch

- Most common indications for new pouch creation:
  - Chronic pelvic infection compromising integrity of the pouch (50%)
  - Small & unusable pouch (33%)
- No patient developed short-bowel syndrome
- Restrictions and QOL were similar
- Pouch survival was similar (New pouch: 92% vs Existing pouch: 85%)
- New pouch creation can safely be performed

Esen et al., 2021, Surgery

Conclusion

- Define exactly what you are calling Crohn’s disease
  - Hx, Hx, Hx
- What does the patient want?
- What are the multidisciplinary work up findings ?
  - Mechanical, Crohn’s or Both?
- Revise or reconstruct options are all on the table, complemented by liberal medical therapy if concerns of Crohn’s disease is high
- Both the patient and the institution needs to understand it may be a life long relationship

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Thank you

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IBDHorizons

Panel Discussion

Moderator: Anita Afzali, MD

Feza Remzi, MD

Christina Ha, MD

Bincy Abraham, MD

Casey Chapman, M.D.

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1st Gulf Coast Symposium

Omni Royal Hotel New Orleans, Louisiana

October 15, 2022

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