J-Pouches and Stomas

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Agenda

• J-pouch Surgery for Ulcerative Colitis
  • Colectomy
  • Reconstruction
  • Postoperative expectations
• Stomas
  • Types
  • Enterostomal therapy
  • Pouching and supplies
  • Expectations
J-pouch Surgery For Ulcerative Colitis
UC – Goals of Surgery

• Prevent life threatening complications
• Get off of immunosuppression
• Minimize extra intestinal manifestations
  • Peripheral Arthritis (15-25%)
  • Skin lesions (1-5%)
    • Pyoderma gangrenosum
    • Erythema nodosum
  • Blood clots
• **Cure The Disease!**
UC – Surgical Indications

**Emergency Situations**
- Fulminant disease unresponsive to maximal medical therapy
- Toxic Colitis
- Perforation
- Hemorrhage

**Elective Situations**
- Dysplasia/Neoplasia
- Complications or Intolerance to medical therapy
- Disease activity refractory to medical therapy
- Disabling extraintestinal manifestations
- Growth retardation in children

Between 30%–40% of UC patients will eventually require surgery, with the majority of patients requiring surgery within 10 years of initial diagnosis.
**UC – Surgical options**

**Emergency Situations**
- Subtotal colectomy + End Ileostomy
  - Restore the patient to health
  - Recovery, withdrawal from medications
  - Then - Proctectomy +/- Pouch +/- Diverting ileostomy

**Elective Situations**
- Total proctocolectomy +/- Pouch +/- Diverting ileostomy
Total Proctocolectomy + Brooke Ileostomy
J-Pouch Reconstruction

B First stage
- temporary ileostomy diverts flow (while ileoanal anastomosis heals)

C Second stage
- prior ileostomy site
- ileal reservoir functions as "new" rectum
Types of Ileal Pouches

S-Pouch

J-Pouch

W-Pouch

UC San Diego
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UC – Staging the Surgery

- **Stages**
  - **3 Stage:**
    1. Subtotal Colectomy + End Ileostomy
    2. Restorative Proctocolectomy + Loop Ileostomy
    3. Loop Ileostomy closure +/- Stricture Dilation
  
  - **2 Stage:**
    1. Total Proctocolectomy + J-pouch Creation + Loop Ileostomy
    2. Loop Ileostomy Closure

    
    Or

    1. Subtotal Colectomy
    2. Restorative Proctocolectomy (undiverted)

- **1 Stage:**
  - Total Proctocolectomy + Creation of J-Pouch (undiverted)
Minimally Invasive Approaches

- Laparoscopy
  - Small incisions between 0.5-3 cm in size for access
  - Largest incision is smallest incision that the organ can be removed from
  - First approach for most abdominal surgeries
  - Definite benefit in pain, recovery, return to work
  - Single incision laparoscopy (SILS)

- Robotic Surgery
  - Laparoscopic Surgery but instruments held by robot
  - Better articulation
  - Better ergonomics
  - Many consider better for low pelvic surgery
  - Similar benefits as laparoscopy
UC- Postoperative Expectations

• After subtotal colectomy or restorative proctocolectomy
  • 3-7 days in the hospital
    • Discharged criteria:
      • Stoma functioning
      • Eating
      • Off IV medications and fluids
      • Able to take care of self at home or accepted to rehab facility
  • 2-4 weeks pain requiring narcotic pain medication
  • 4-6 weeks decreased energy level
  • 6 months before feel back to old self/better
• Somewhat less after ileostomy closure
• After STC goal is to get off of all UC meds
UC- Postoperative Expectations

• Pouch function
  • Initially
    • Many BMs, fairly liquid
    • Minimal urgency
  • With time
    • Fewer BMs
    • Thicken up
  • Ultimate expectation – Can be up to 6 mos
    • 4-8 BMs daily
    • Toothpaste consistency
    • No urgency
    • Excellent to perfect continence
      • ~5-10% night time seepage requiring a pad
UC – Surgical Complications

- **Mortality:** 0 – 1%
- **Morbidity:**
  - Pouchitis – 50%
  - Cuffitis
  - Anastomotic Stricture – 5-40%
  - Small bowel obstruction – 20%
  - Pelvic sepsis (early and late) – 5-25%
  - Anasotomotic separation – 10%
  - Pouch vaginal fistula – 10%
  - Incontinence
  - Decreased fertility in women – 3 fold
  - Pouch loss – 5-8%
Conclusions

• J-pouch surgery is a good option for patients with poorly controlled UC

• Can be staged in a variety of ways
  • The key to minimizing complications is seeing an experienced surgeon

• There are minimally invasive approaches

• Function is better than life with UC in most cases

• Most postoperative issues are manageable without more surgery
Stomases
What is an Ostomy?

• Surgically created opening utilizing intestinal or other tissue to divert body waste

• Usually the ostomy is named according to the tissue used or the drainage expected

• Ileostomy: made with ileum (small intestine)

• Colostomy: made with colon (large intestine)

• Urostomy: drains urine
Stoma Stats

- First ostomy created in 1776 for bowel obstruction
- No one really knows how many ostomates are in the US or World Wide
- Estimates range from 450,000-800,000 in US
- Colostomy = ileostomy = urostomy
- Average age = 68.3
Stoma Comparison

**Ileostomy**
- Last part of small bowel
- More liquid effluent
  - More difficult pouching
  - More leakage
  - More dehydration
- Less bacteria – minimal odor
- Must be raised (Brooked)
- Easier to reverse
  - Better temporary stoma

**Colostomy**
- Colon
- More solid effluent the further along the colon
  - Easier pouching
  - Less leakage
  - Less dehydration
- More bacteria – more odor
- Can be flat (flush)
- More difficult to reverse
  - Better permanent stoma
Stomas

Colostomy

End Ileostomy  Loop Ileostomy
Enterostomal Therapists (Ostomy Nurses)

- Prior to making the stoma
  - Counseling on expectations
  - Evaluation for positioning
  - Long term planning
- In the hospital immediately postoperatively
  - Teaching for pouching
  - Troubleshooting
  - Ordering supplies
- Long term postoperatively
  - Help with any changes in pouching
  - Skin care
  - New products
Positioning

• Good positioning is key to longterm quality of life

• The ideal stoma:
  • Location Location Location: Visually/physically accessible, away from:
    • Belt line
    • Body folds or creases
    • Surgical scars
    • Hernias
    • Bony prominences
  • Well Budded
  • Centered OS
  • Good blood supply
Stoma Site Marking

- Patient laying down
- Looks like a nice flat abdomen
- BUT........
Stoma Site Marking

This is what happens when the patient sits up
Pouching
Equipment
Colostomy Irrigation

- Can avoid wearing a bag altogether if you irrigate your colostomy
- Only works for left sided colostomies
  - Enema every other day
  - Can be time consuming
**Complications**

**Irritant Dermatitis**
- Causes:
  - Poorly fitting pouch
  - Flush stoma
- Treatment:
  - Adjust Pouching Technique
  - Stoma Revision

**Parastomal Hernia**
- Causes:
  - Significant weight gain
  - Emergency stoma creation/malnutrition
  - Bad luck
- Treatment:
  - Adjust Pouching Technique
  - Stoma repair/Resiting (<10%)

**Stoma Prolapse**
- Causes:
  - Transverse Colostomy
  - Malnutrition
- Treatment:
  - Stoma Revision

**Stoma Retraction**
- Causes:
  - Weight gain
  - Stoma made in crease
- Treatment:
  - Adjust Pouching Technique
  - Stoma Revision
Colostomy Irrigation

- Can avoid wearing a bag altogether if you irrigate your colostomy
- Only works for left sided colostomies
  - Enema every other day
  - Can be time consuming
What to ask your surgeon prior to stoma creation

• What kind of stoma will it be?
  • Expectations for location and quality of effluent?
• Will it be reversible?
  • How involved will the subsequent surgery be?
• Can I meet with an enterostomal therapist?
  • Who will mark the stoma site prior to surgery?
  • When will this be done?
Most Common Patient Concerns

- Leakage > may need a refit or modification
- Odor > pouches are odor proof, deodorants available
- Clothing > minimal modifications
- Sex> fine once ok by MD, don’t use stoma
- Dating/ Disclosure> no one needs to know
- Showering/Bathing> no problem
- Swimming/ Sports> have fun
- Travel> have pouch will travel
Live your life normally!
Conclusions

• Stomas are more common than you would think
  • Not all stomas are the same
  • Some are reversible, some are not
• Enterostomal therapists are a key member of the surgical team
  • See them before surgery
  • See them after surgery
• You can do whatever you want with your stoma
  • Life with a stoma is likely better than living with the problem which led to stoma formation