## LAPAROSCOPIC ILEOCOLIC ANASTOMOSIS: TIPS AND TRICKS





#### LAPAROSCOPIC RIGHT COLECTOMY

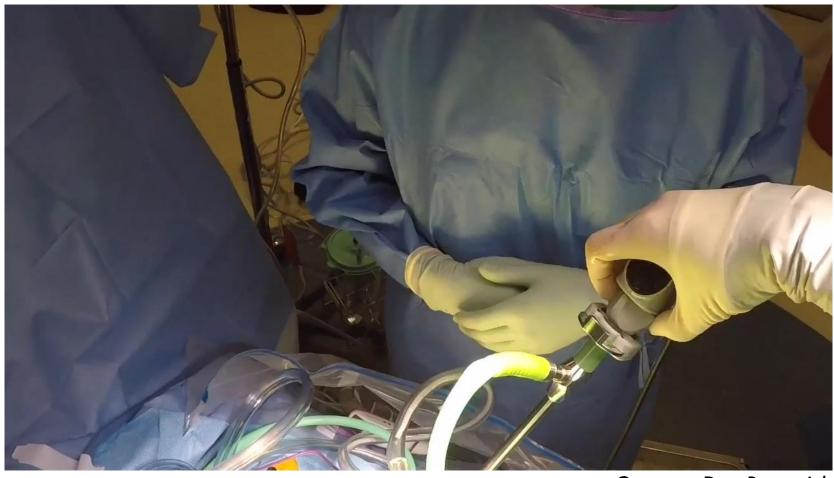
- Laparoscopic mobilization with vascular pedicle ligation
- Umbilical (midline) extraction
- Division of mesentery
- Extracorporeal anastomosis (side-to-side)

#### WITH INTRACORPOREAL ANASTOMOSIS (ICA)

- Laparoscopic mobilization with vascular pedicle ligation
- Mesenteric division
- Intracorporeal anastomosis (isoperistaltic)
- Pfannensteil extracton



### **VIDEO – EXTRACORPOREAL**



Courtesy Dan Popowich

### BENEFITS OF MY 'OLD' TECHNIQUE

- It's FAST and EASY
- In good body habitus patients, lateral mobilization is all that is needed to extract
- Mesentery (residual mesentery) can be taken though the extraction incision
- You can upsize your midline incision as needed
- Allows for you to create an anastomosis that you are used to for open cases
- You get to touch the bowel (added layer of security)



### **POST OP RESULTS**

Larger extraction sites than desired?

Pain

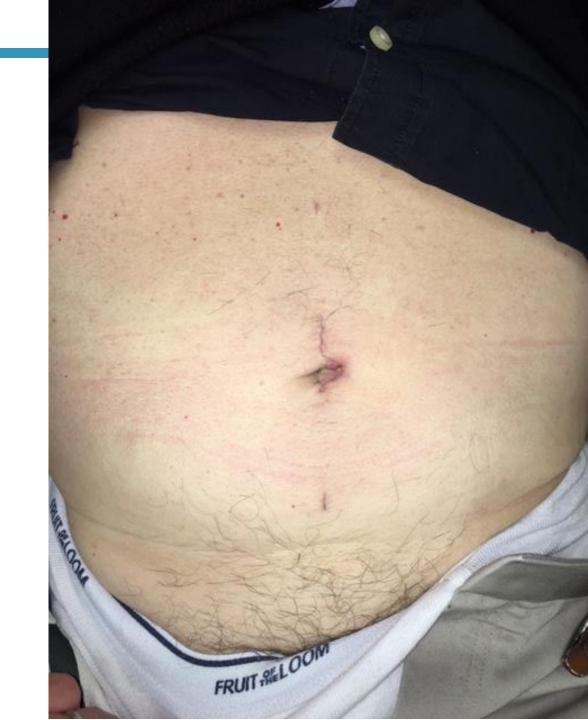
Wound infection rates

Incisional hernia rate (15%)

Overmobilization required

Can we get better? And if we can...

Does that translate to better patient outcomes?



### PROVEN BENEFITS OF ICA

- Smaller incision size
  - Decreased pain (Add TAPP or QL block)
  - Decrease infection rate
  - Decreased hernia rate
  - Better cosmesis
- Faster return of bowel function
- Less lleus
- Earlier discharge

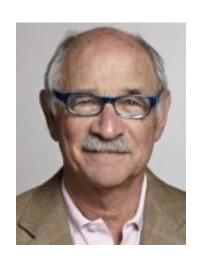


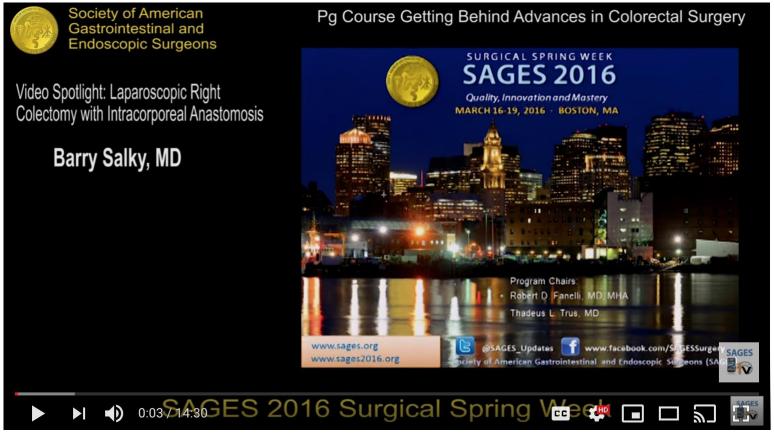
#### POTENTIAL BENEFITS OF ICA

- Requires less lateral mobilization of the bowel
  - Anastomosis can be created anywhere where the bowel lies
  - Less trauma to the remaining bowel/mesentery during extraction
  - You will NEVER twist your anastomosis
- Allows smallest possible extraction incision
- Can choose any extraction incision you want



### MY JOURNEY TO ICA





https://www.youtube.com/watch?v=NmDxwROOpYo

#### **HOW DO WE GET THERE?**

#### What is the same?

- Your medial dissection
- Your lateral dissection

#### What is different?

- Intracorporeal specimen division
- Intracorporeal anastomosis
- Intracorporeal IcG to help assess margins
- Sutured or stapled closure of common channel ("the hard part")



### **PATIENT POSITIONING**

- Arms tucked
- Secured to table
- Pink pad
- Split leg acceptable





### **PORT POSITIONS - TRICKS**

- Camera in umbilical port
- Left and right working arms should be triangulated around the camera
- 5mm suprapubic port (upsized for extraction)
- 5mm trocars are free
- LUQ,LLQ upsized to 12mm for stapler



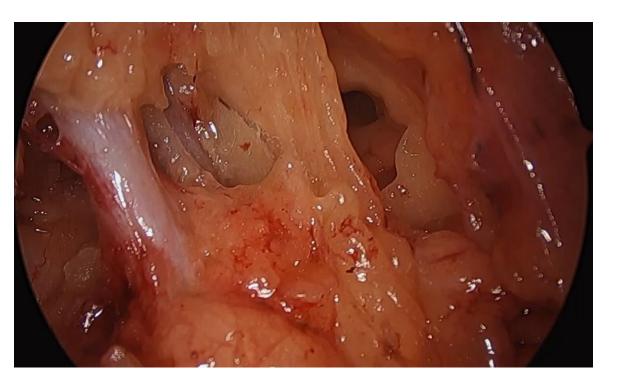
### **MESENTERIC DIVISION**

- After taking the right branch continue to divide the mesocolon
- Divide or remove omentum from the transverse colon
- Check perfusion (Visual +/- ICG)
  - I strongly recommend you do this early in your experience

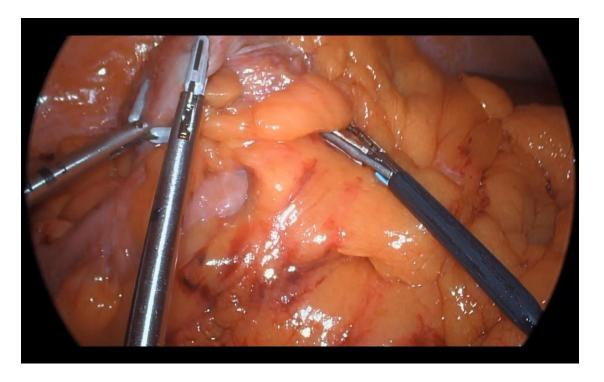


## **MESENTERIC DIVISION**

Mesocolon



#### lleum



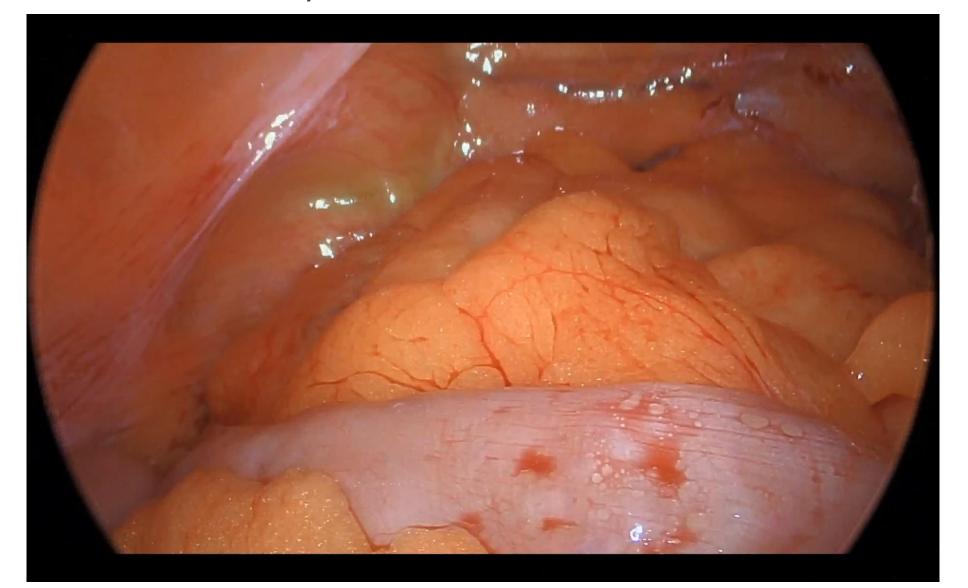


# **BOWEL DIVISION**



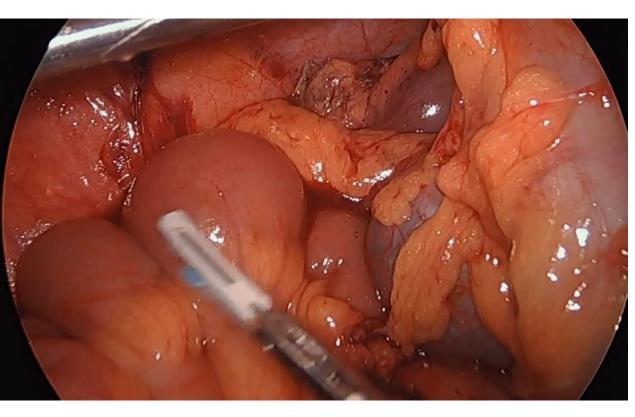


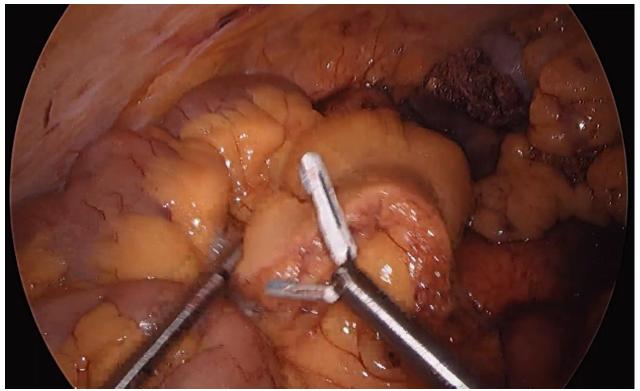
# SETUP STITCH/ALIGNING THE BOWEL





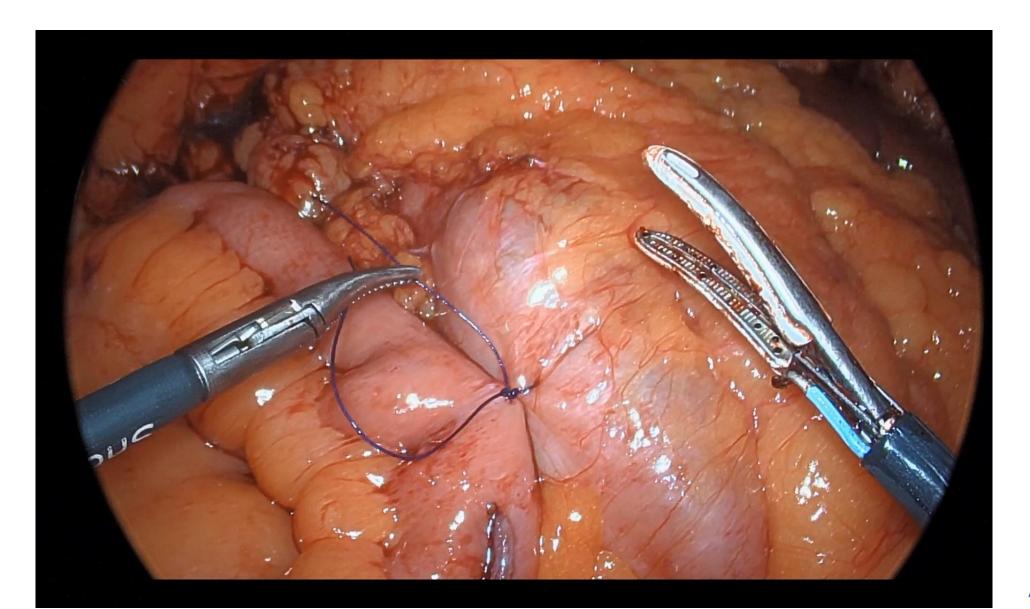
# **ALTERNATIVE TECHNIQUES**





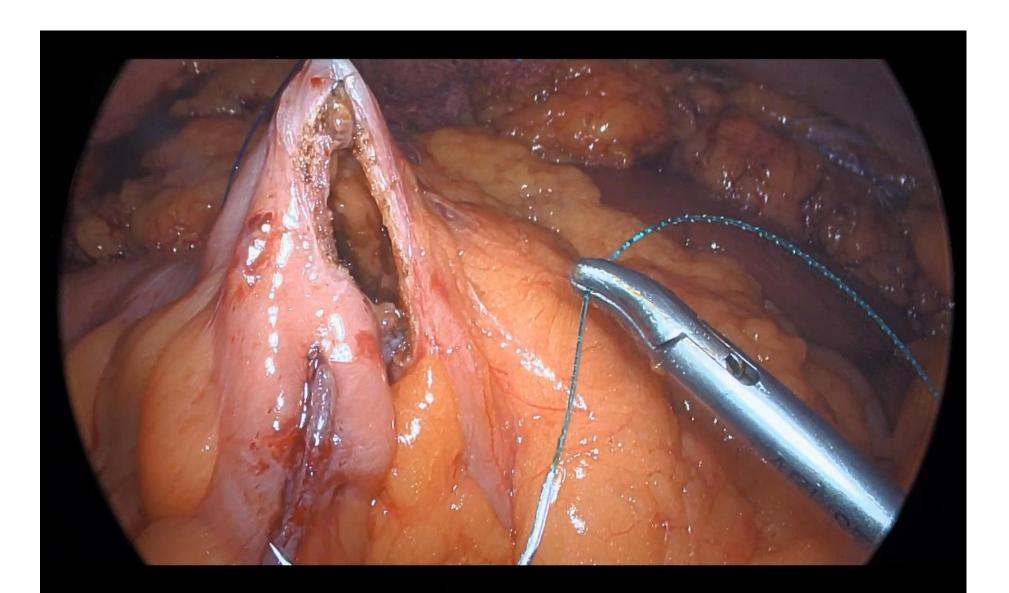


## **ILEOCOLIC ANASTOMOSIS**



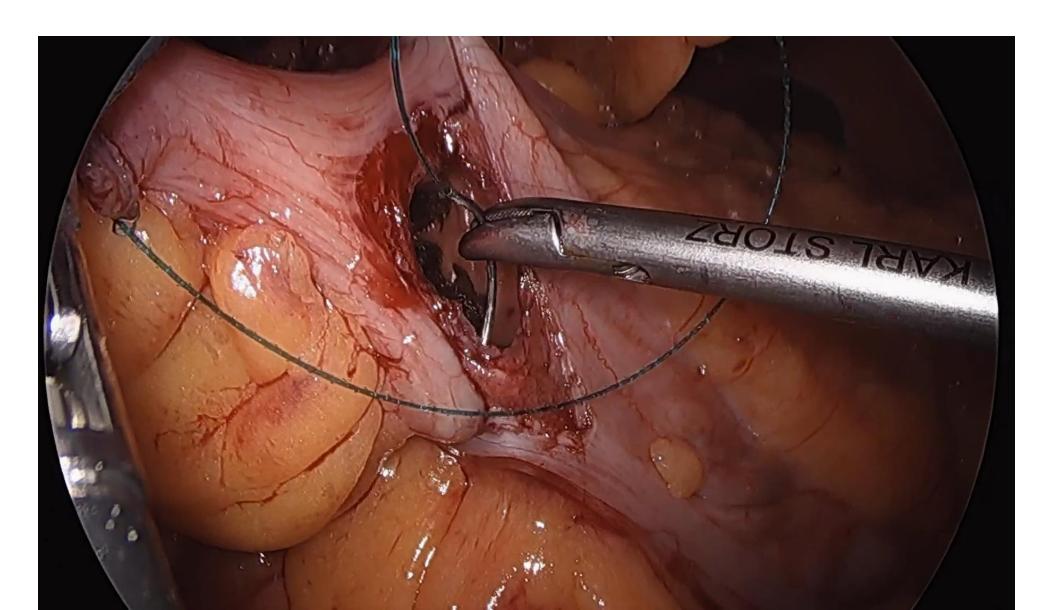


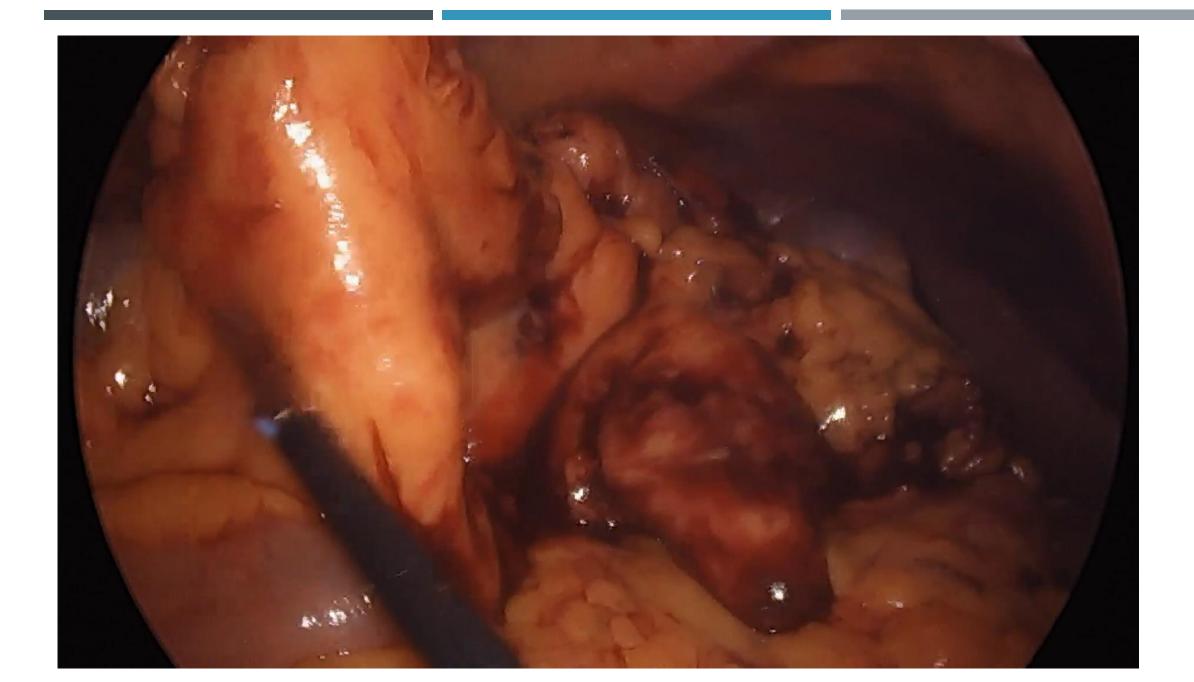
## SUTURING THE COMMON CHANNEL



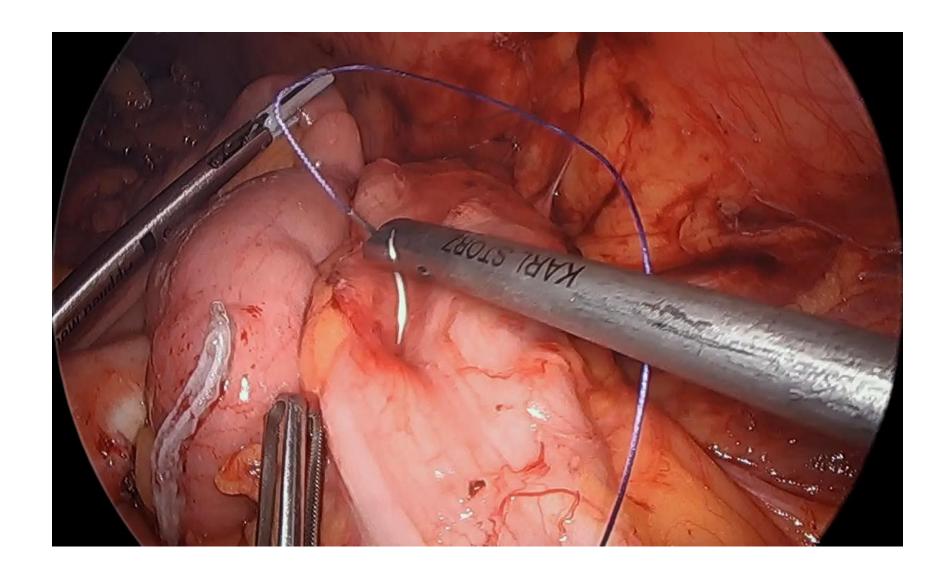


## THE TORN CORNER





## **ILEO-DESCENDING COLON**





#### TAKE HOME POINTS

- ICA offers great benefits to our patients
  - Less pain
  - Less Incisional hernia
  - Earlier discharge
  - Better cosmesis
- Once you get good at it, it can actually be faster than what you already do.



#### **HOW TO GET STARTED**

- Experiment with different port positions
- Get comfortable doing the mesenteric division
- Get comfortable with intracorporeal bowel division
- Pick a thin patient to start
- Watch videos to mentally prepare
- GO FOR IT!

