Magnets In Current Bariatric Practice

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Medical Directory Bariatric Surgery
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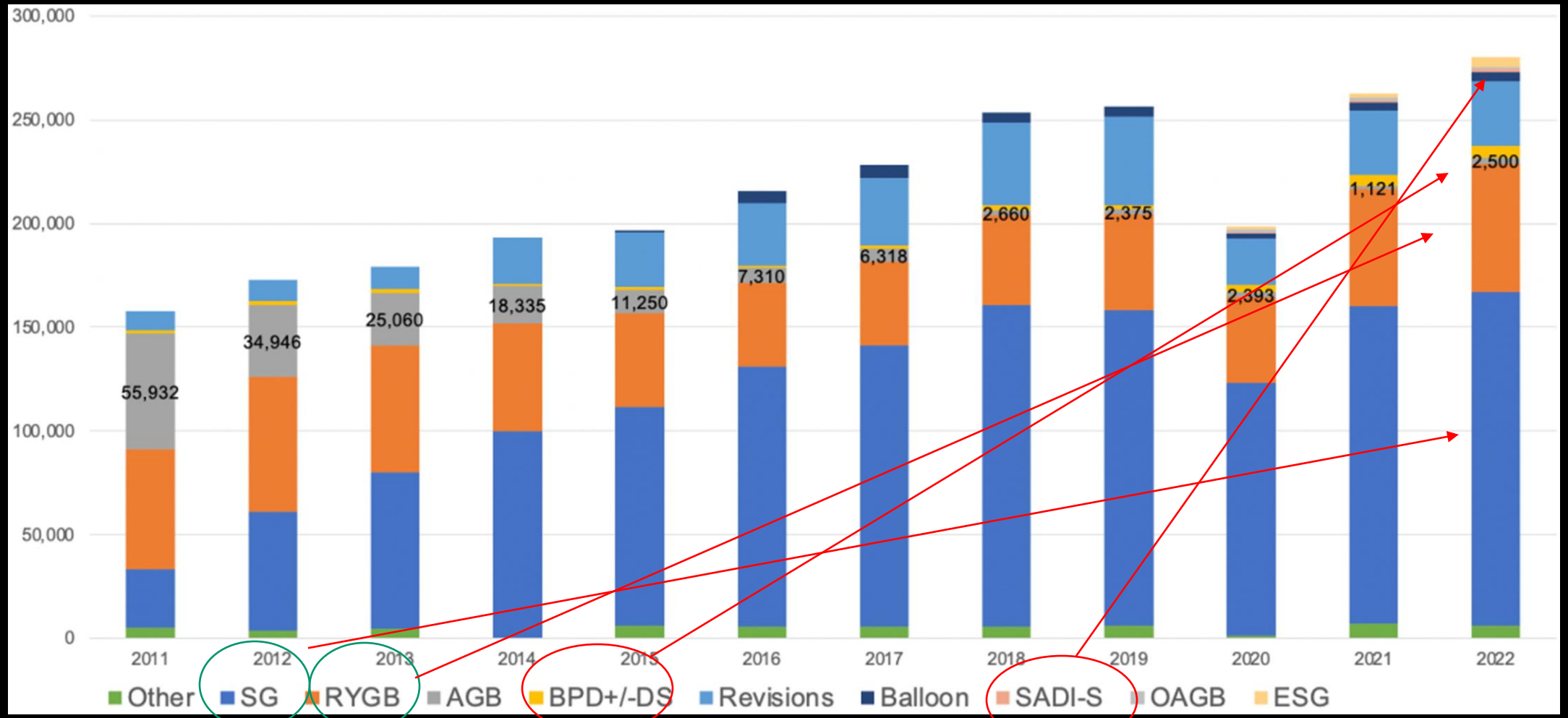
Disclosures

- Teleflex
- Intuitive Surgical
- GT Metabolic
- Suture Ease
- Medtronic
- Lexion

Magnets in Current Bariatric Practice

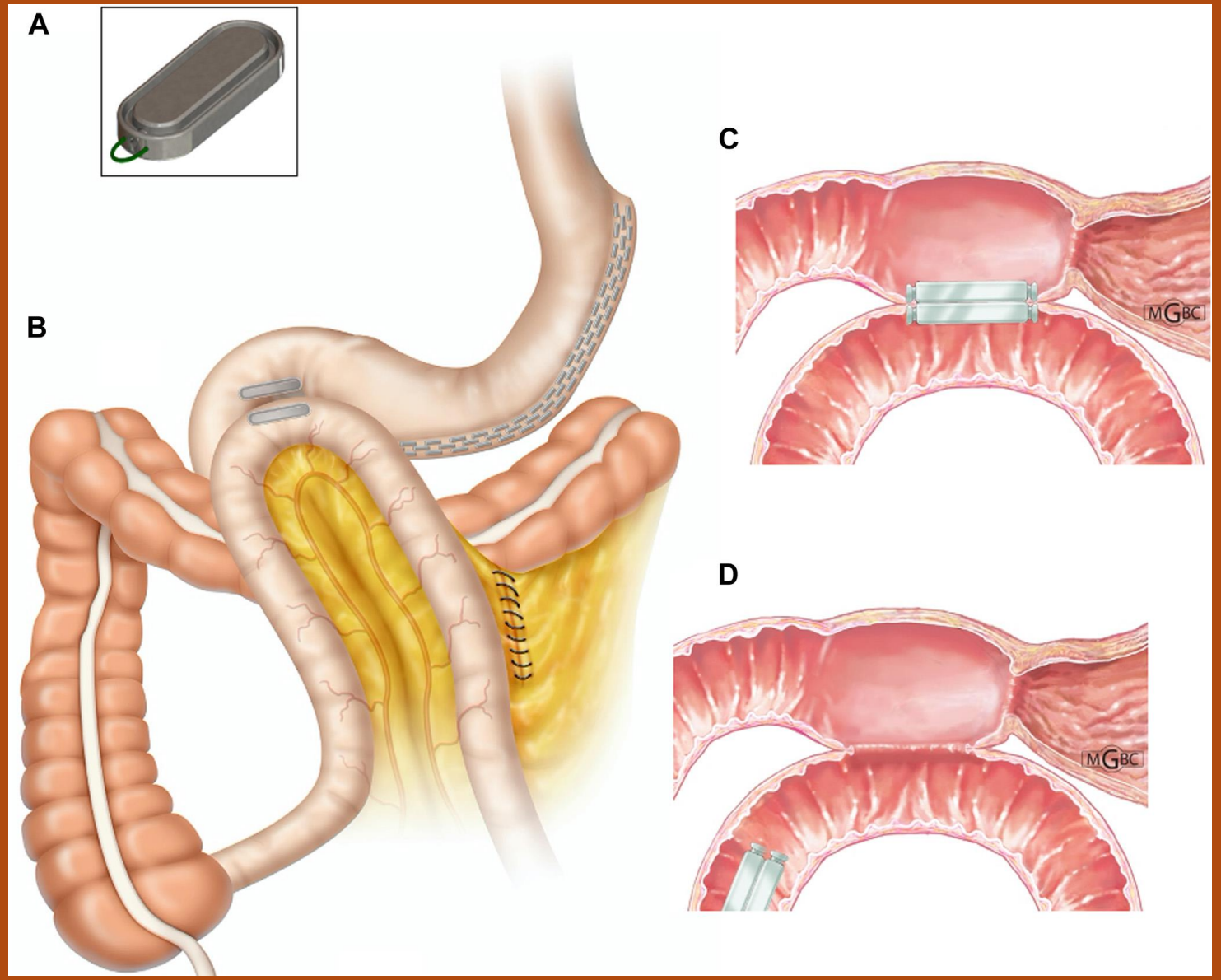
- My Experience
- Performed the First Magnetic Duodenal-ileostomy after FDA approval – USA
  - November 15, 2024
- November 2024 – August 2026
  - 52 Cases
    - 4 Revision sleeve to Sleeve with Duodenal-ileostomy
    - 1 Revision Lap Band to Lap Band with Duodenal Ileostomy
    - 47 Staged DS
      - First stage Sleeve Gastrectomy with Magnetic Duodenal Ileostomy - Completed
      - Planned Second Stage – Transection of Duodenum for SADI-s
  - 2 reversal of Magnetic Duodenal Ileostomy
    - Chronic Nausea
    - Easily Reversed back to sleeve only
    - All symptoms resolved

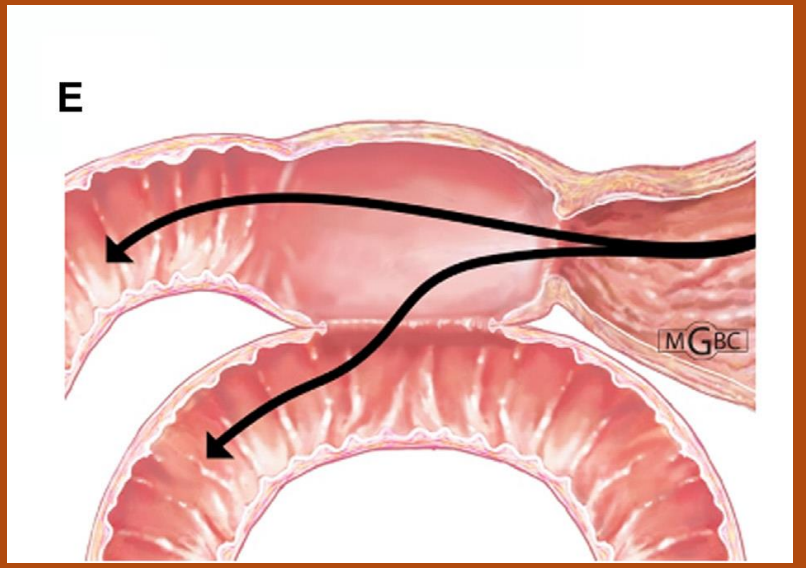
Duodenal Bariatric Surgery
A Story About Procedural Evolution



Why Consider Magnetic Bariatric Surgery?
Eliminates Many of The Risks of Duodenal Surgery

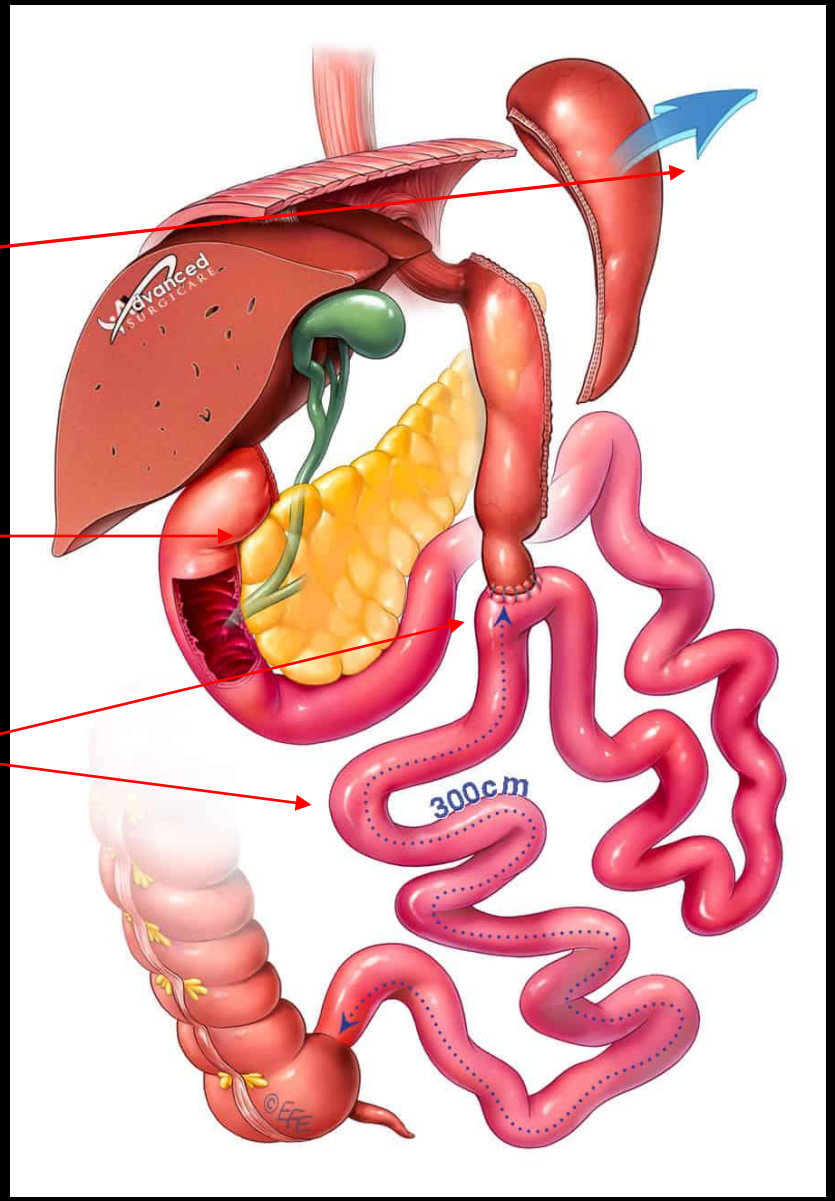
- Understanding Anatomic Challenges
  - Posterior Duodenal Dissection
  - How to Avoid Bleeding
  - How to Manage Bleeding
- Dissecting The Duodenum
  - Staple Line Disruption
  - Posterior Duodenal Injury
  - Pancreatic Injuries
- Mobilizing The Proximal Duodenum
  - The Blue Duodenum
  - Right Gastric Artery ligation
  - Obtaining Enough Proximal Duodenum


A
B
C
D
MGBC
MGBC
MGBC

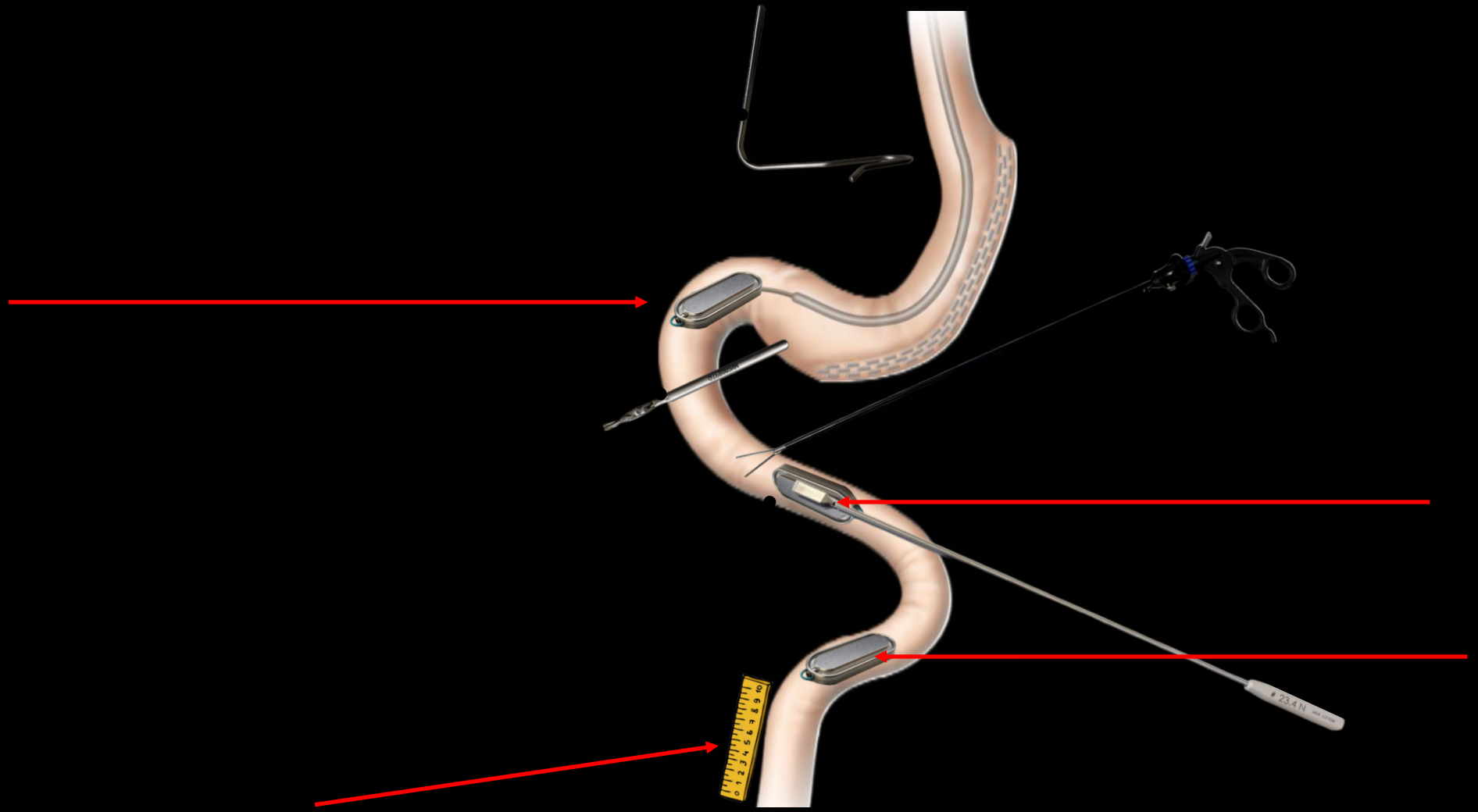

E
MGBC

Staging the SADI -SADI
The Ideal Magnetic Bariatric Surgery

- Division of short gastric vessels
- Gastric sleeve resection over a wide bougie
- Dissection of the duodenum down to the GD artery
- Division of the duodenum
- Measurement of the small bowel from the ileocecal valve
- Duodeno-ileal end-to-side anastomosis



Creating a Staged SADI procedure
Magnetic Bariatric Surgery, what are the steps?



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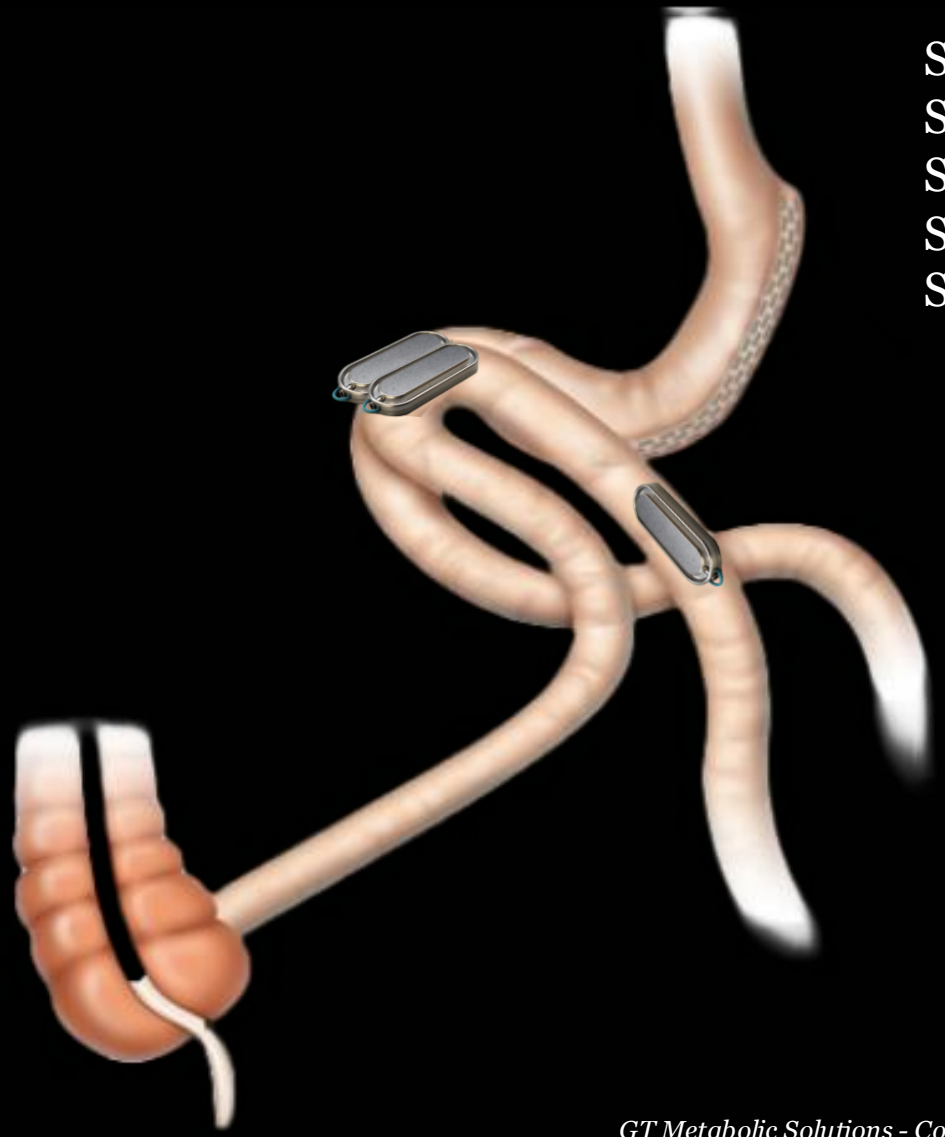


Step 1 Direct Delivery of the Magnet into ileum
Step 2 Move the Magnet – 300 cm site
Step 2 Direct Delivery of the Magnet into the duodenum
Step 3 Dock the Magnets
Step 4 Sleeve the Stomach

What Steps Are Staged For Later?

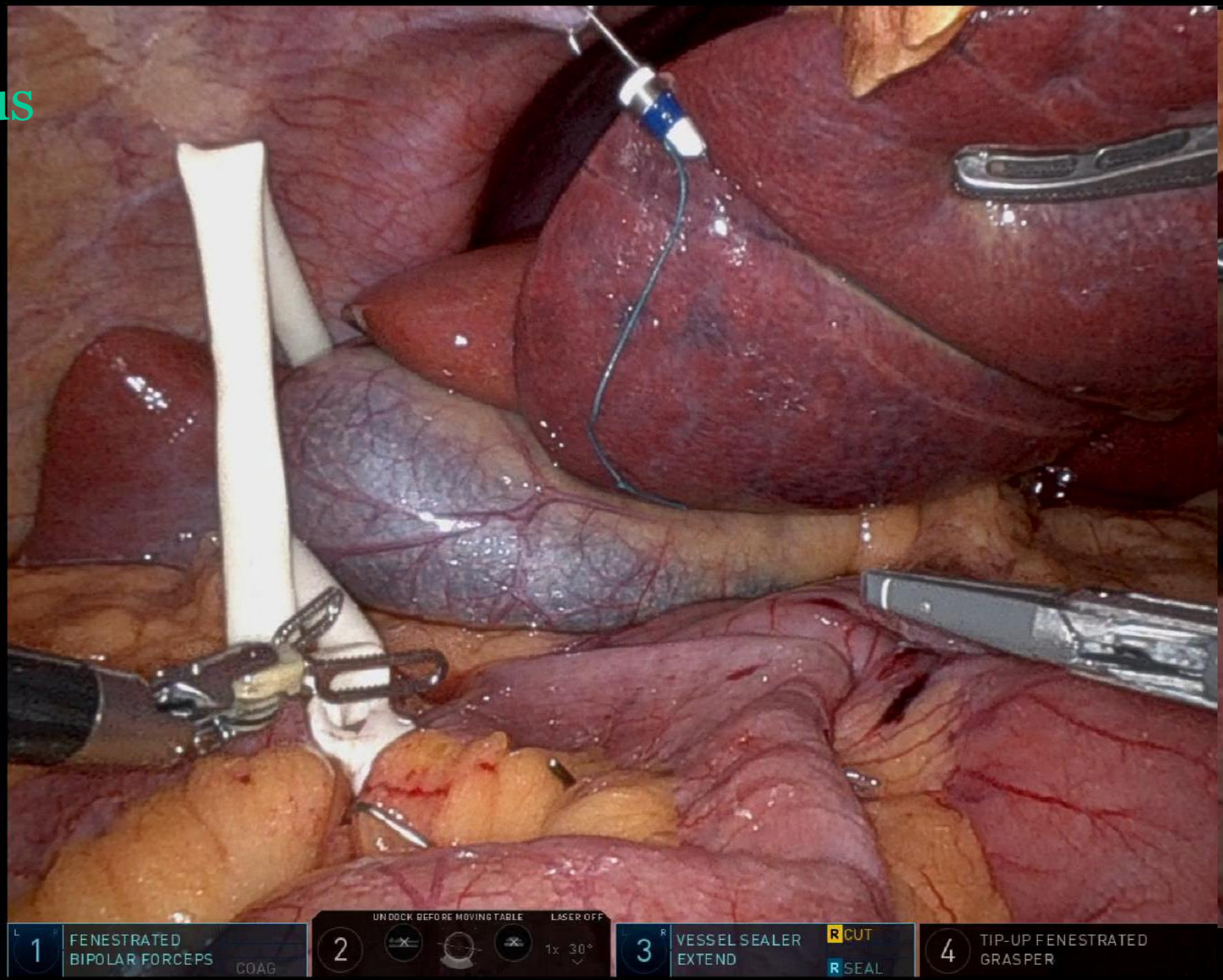
- Dividing the duodenum
- Shortening the Common Channel

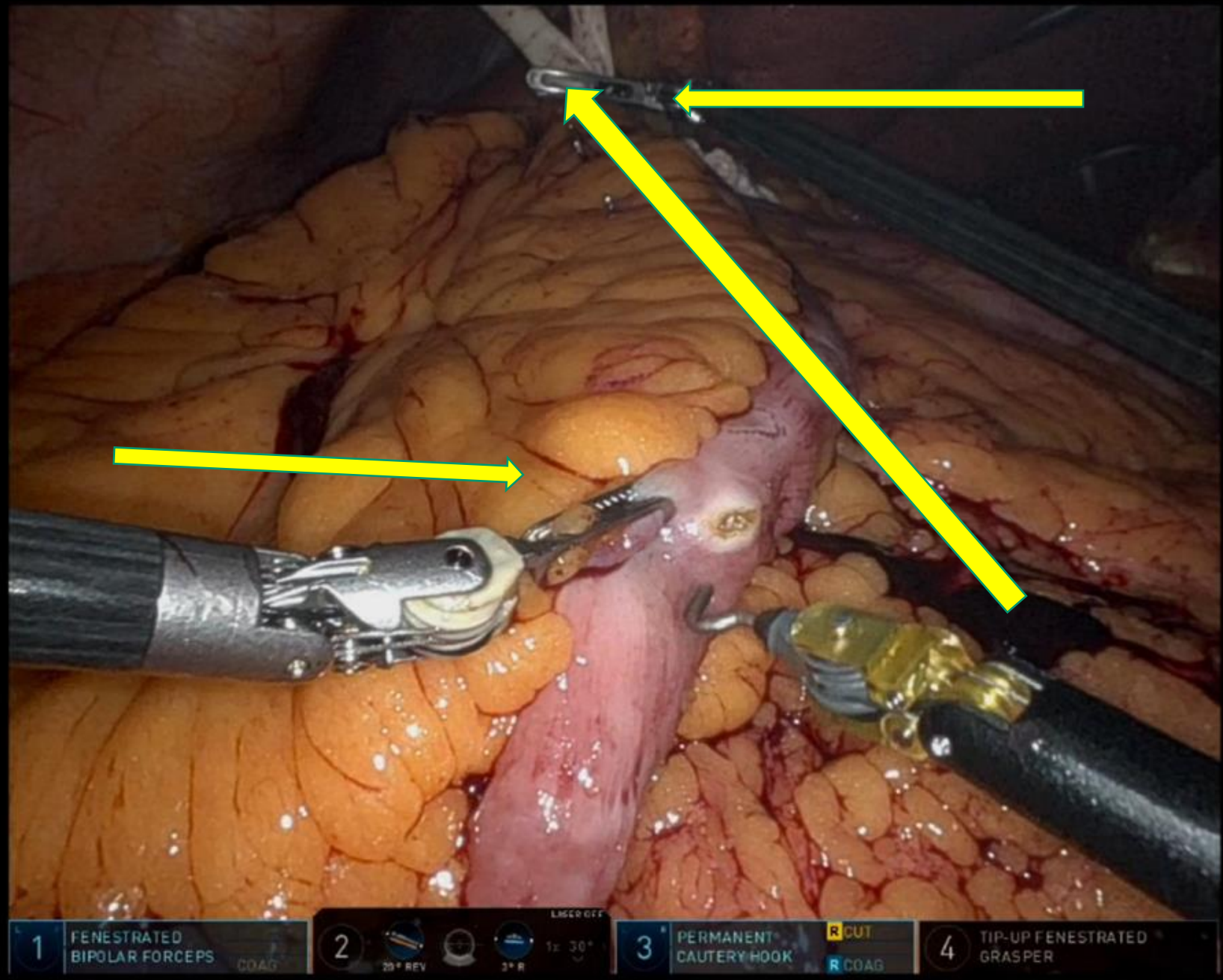
Principles of Robotic Intestinal Magnetic Surgery

- Key Concepts
  - Classic Magnetic Duodenal Ileostomy (MAGDi)
    - Swallowing Magnets
    - Surfing Magnets
    - Endoscopic Delivery of Duodenal Magnets
  - Robotic Magnetic Duodenal Ileostomy
    - Robotic Direct Entry of Intestinal Magnet (swallowing is eliminated)
    - Hammock Technique to suspend and Dock Magnets (Magnetic Positioning Wand is eliminated)
    - Direct Entry of Duodenal Magnet via Small Gastrotomy (Endoscopic Delivery is eliminated)

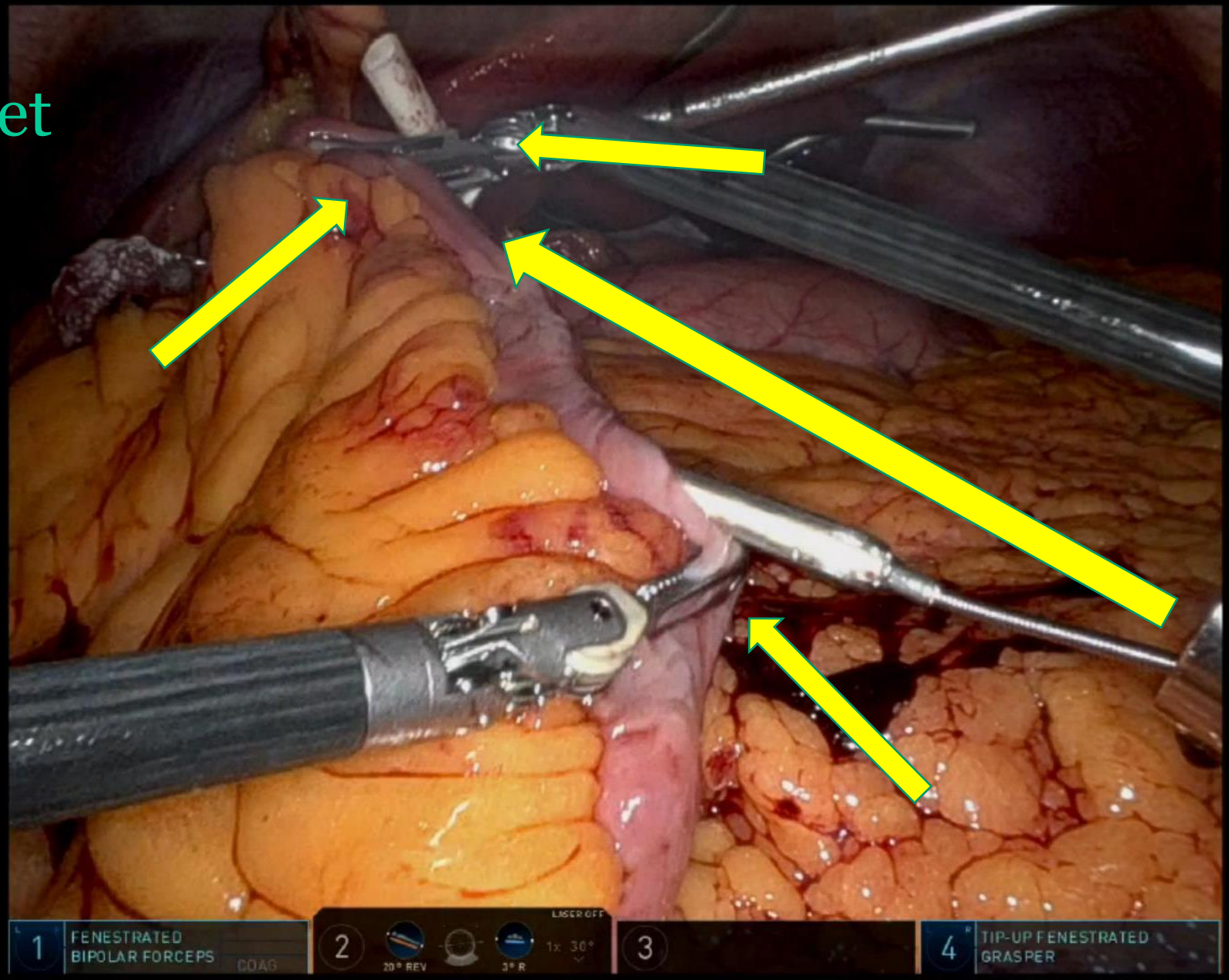
Robotic Sleeve Plus

- Key Concepts
  - Eliminate Swallowing
  - Eliminate Radiology
  - On Time OR Start
- Economics “Cost”
  - Eliminate Endoscopy
  - Less OR Time
  - Improved Overall Cost

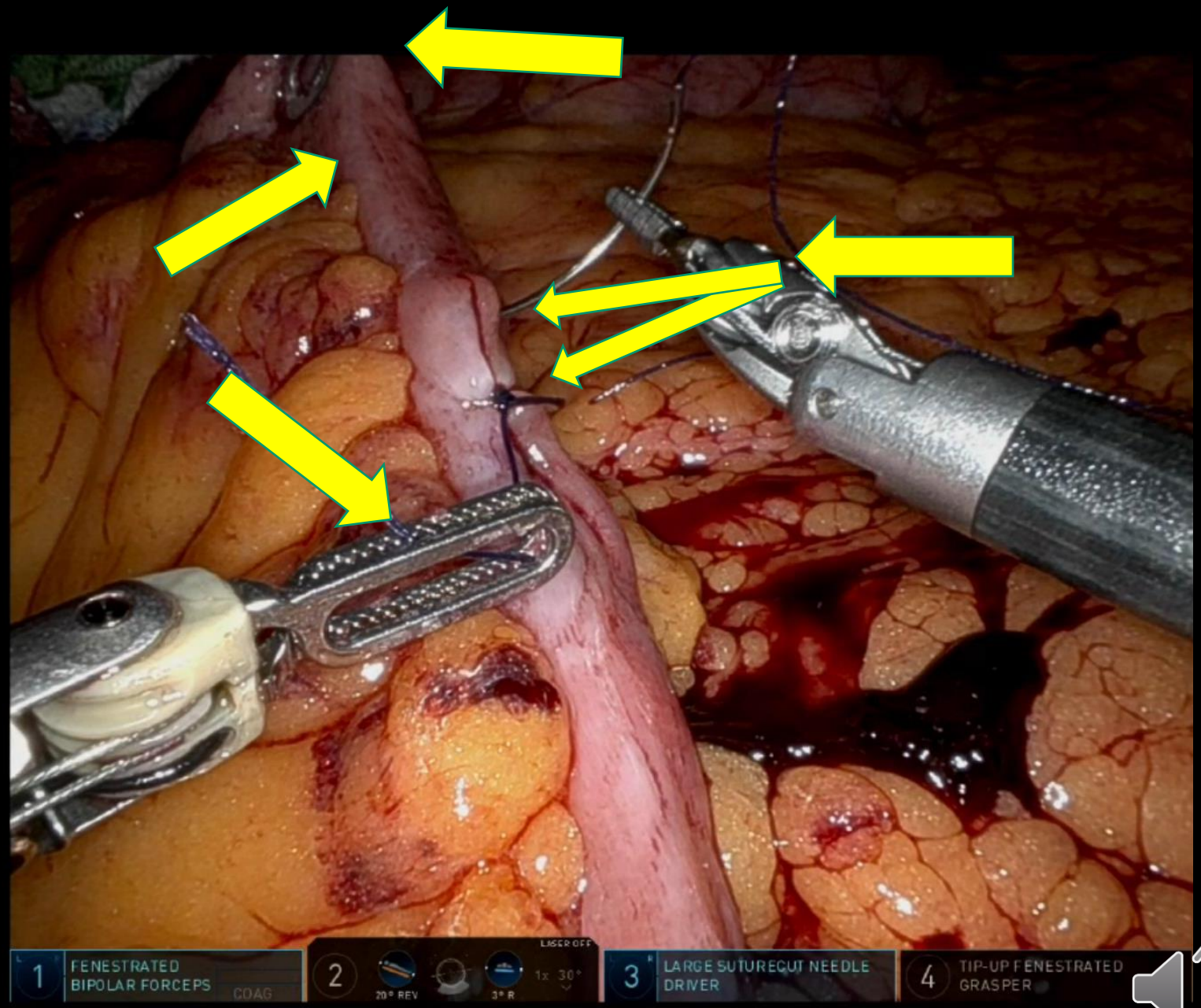



1
FENESTRATED
BIPOLAR FORCEPS
COAG
2
LASER OFF
3
PERMANENT
CAUTERY HOOK
R CUT
R COAG
4
TIP-UP FENESTRATED
GRASPER

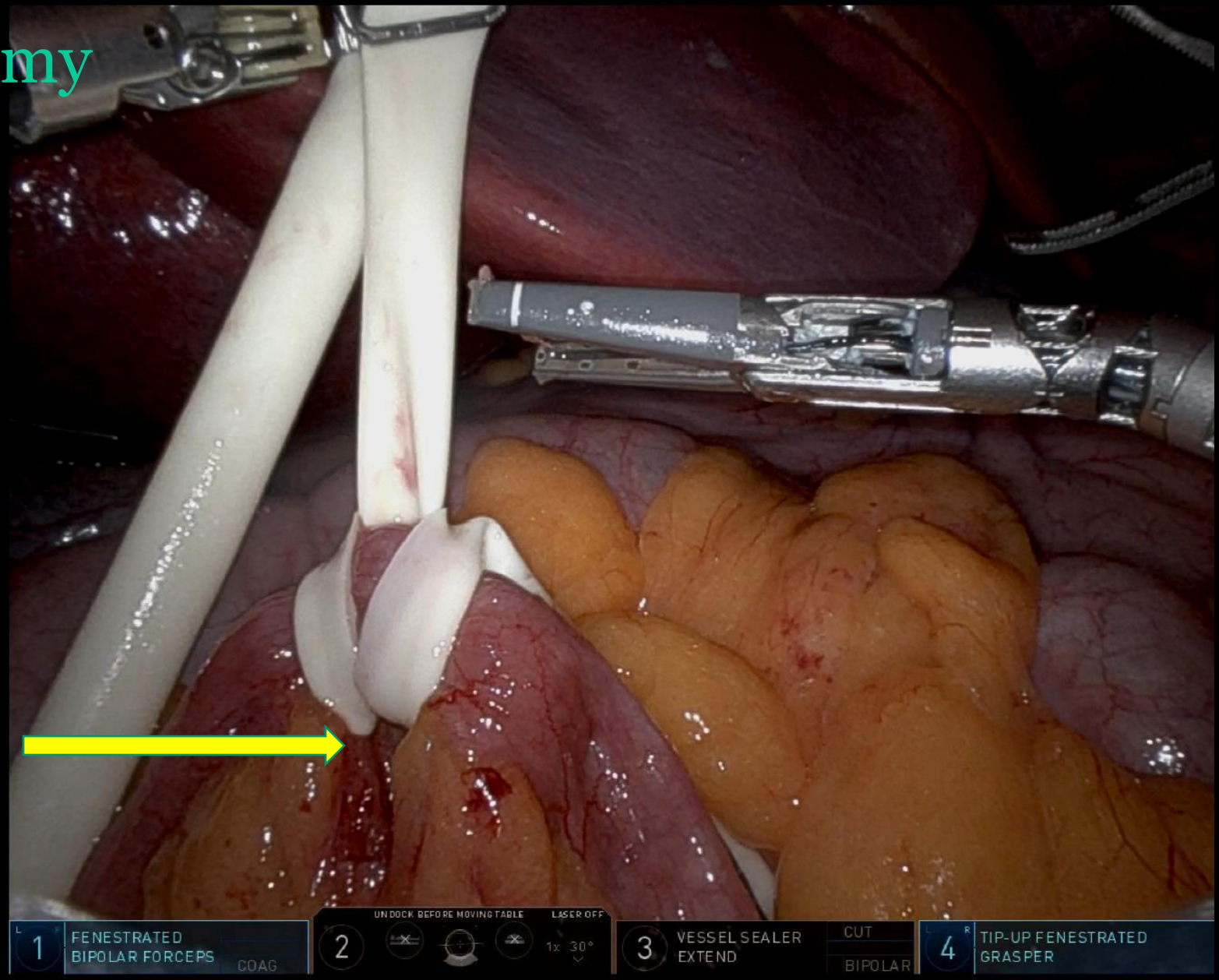
Deliver the First Magnet



Close The Enterotomy



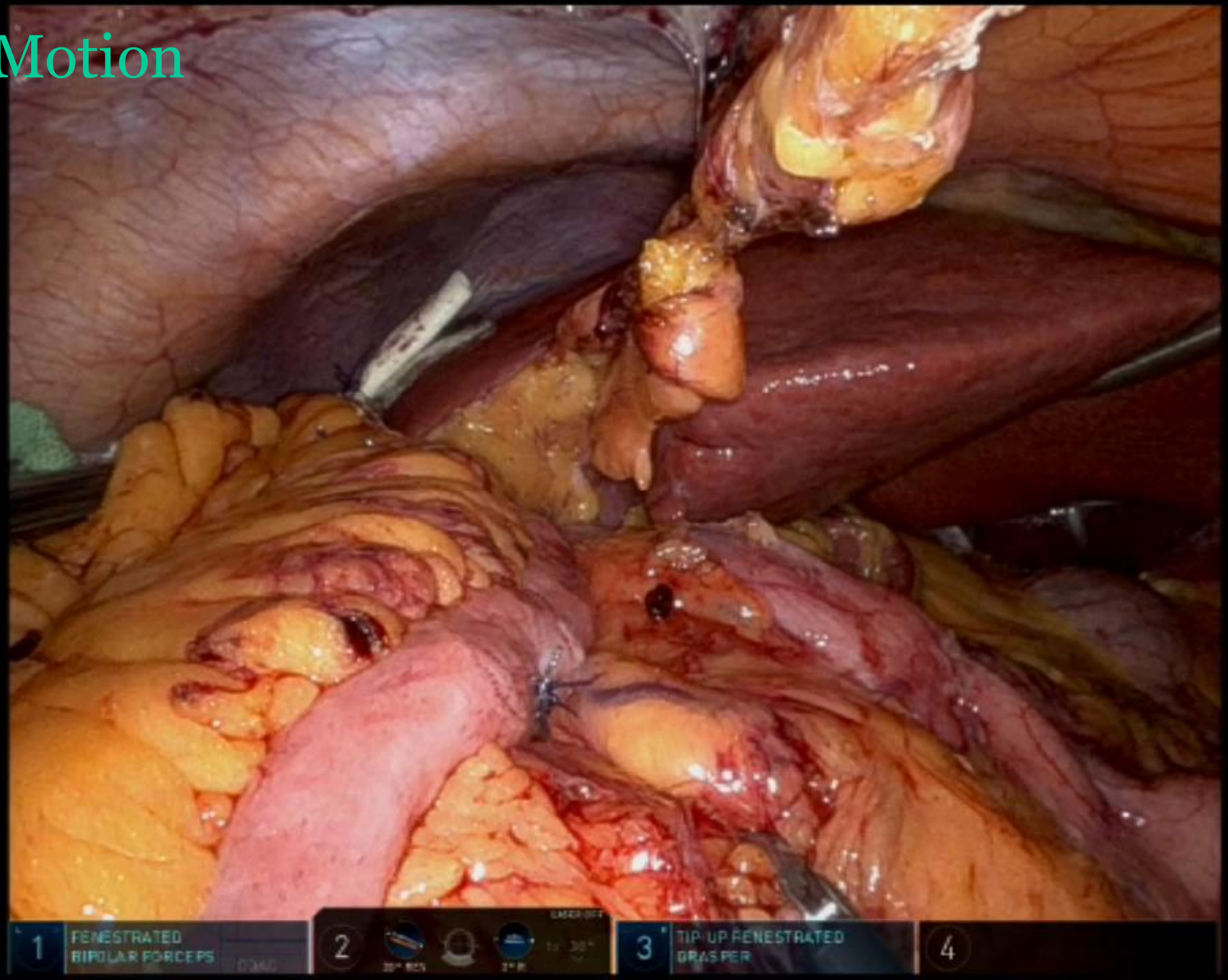
The Penrose Drain for Duodenal Ileostomy



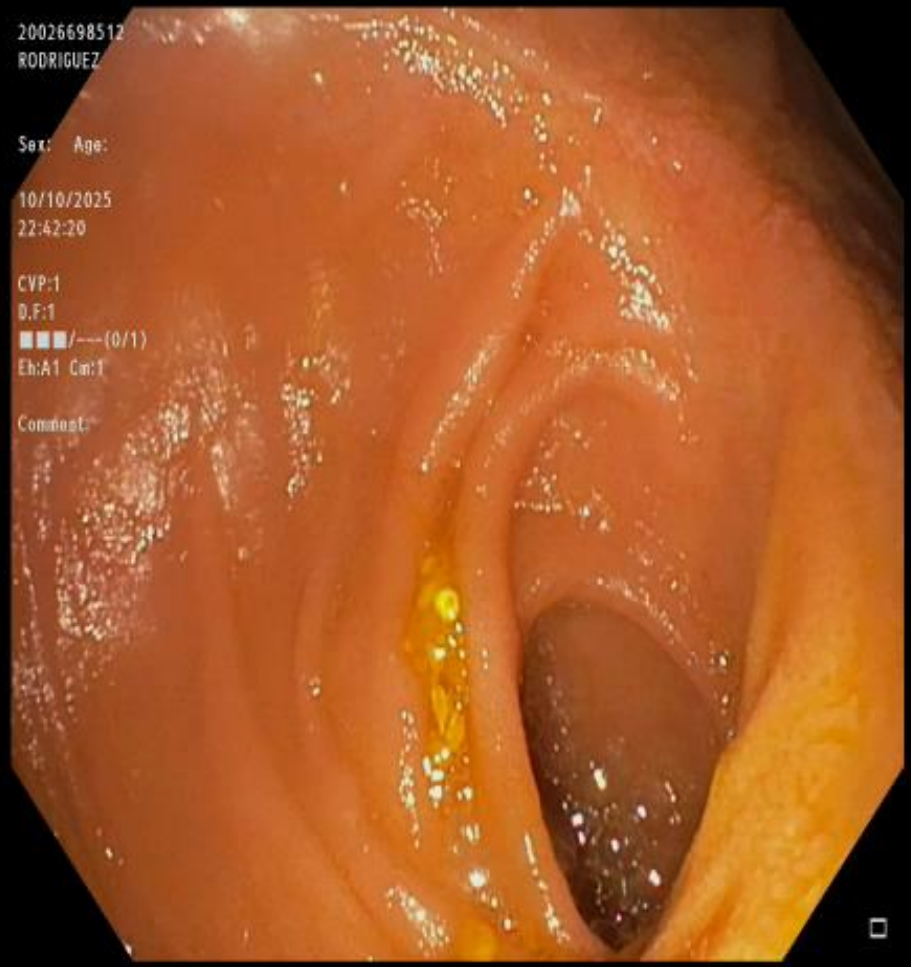
Step 1

Measuring the Common Channel

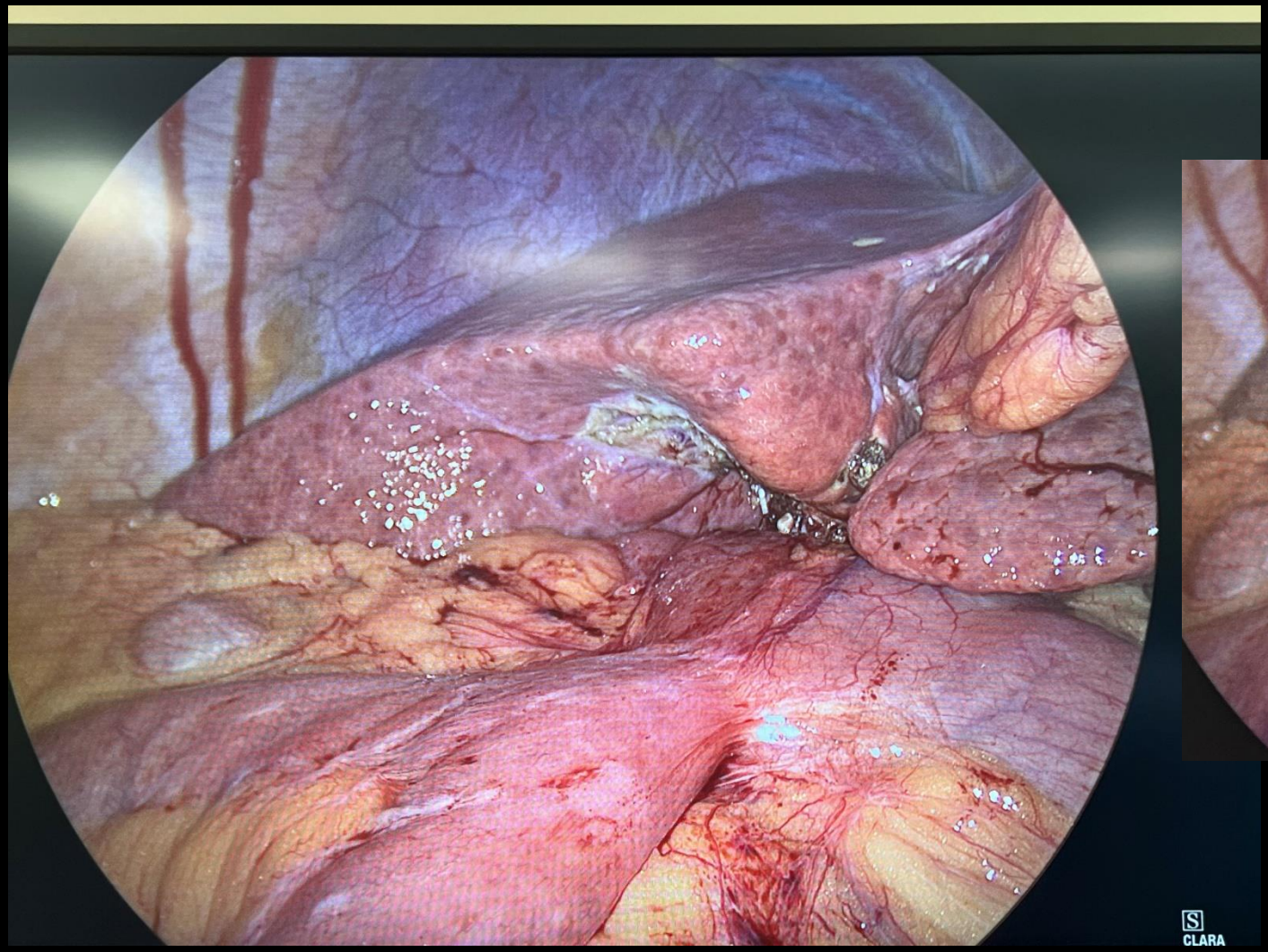
Docking Slow Motion

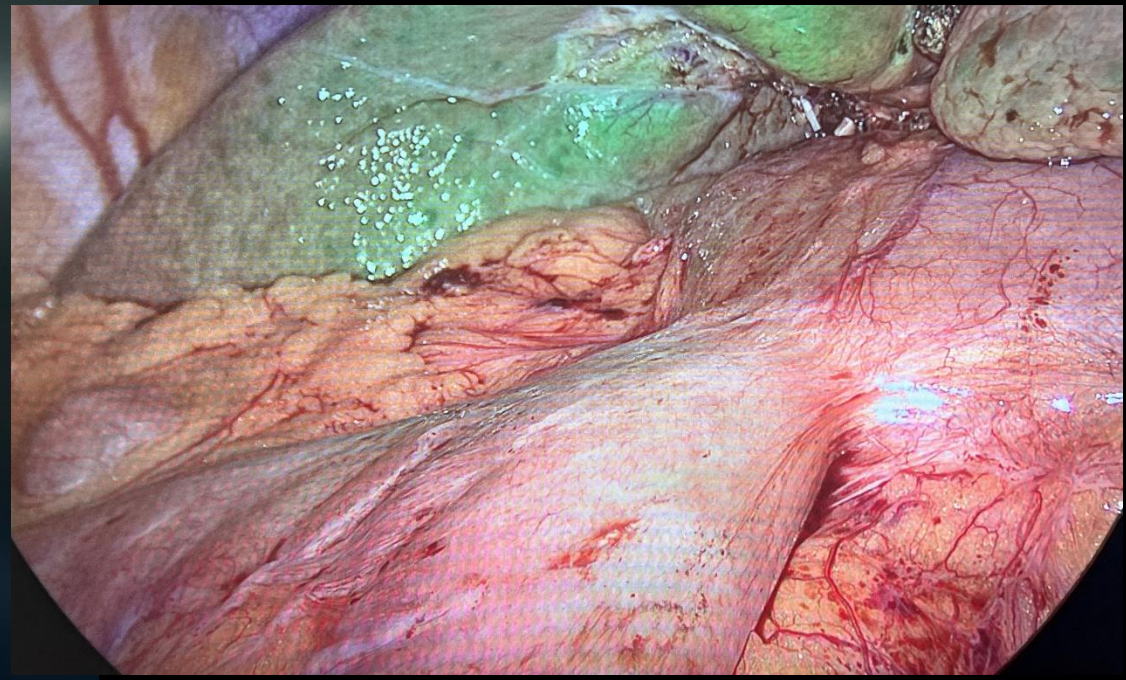


Magnetic Anastomosis 3 Months
50 mm Magnet

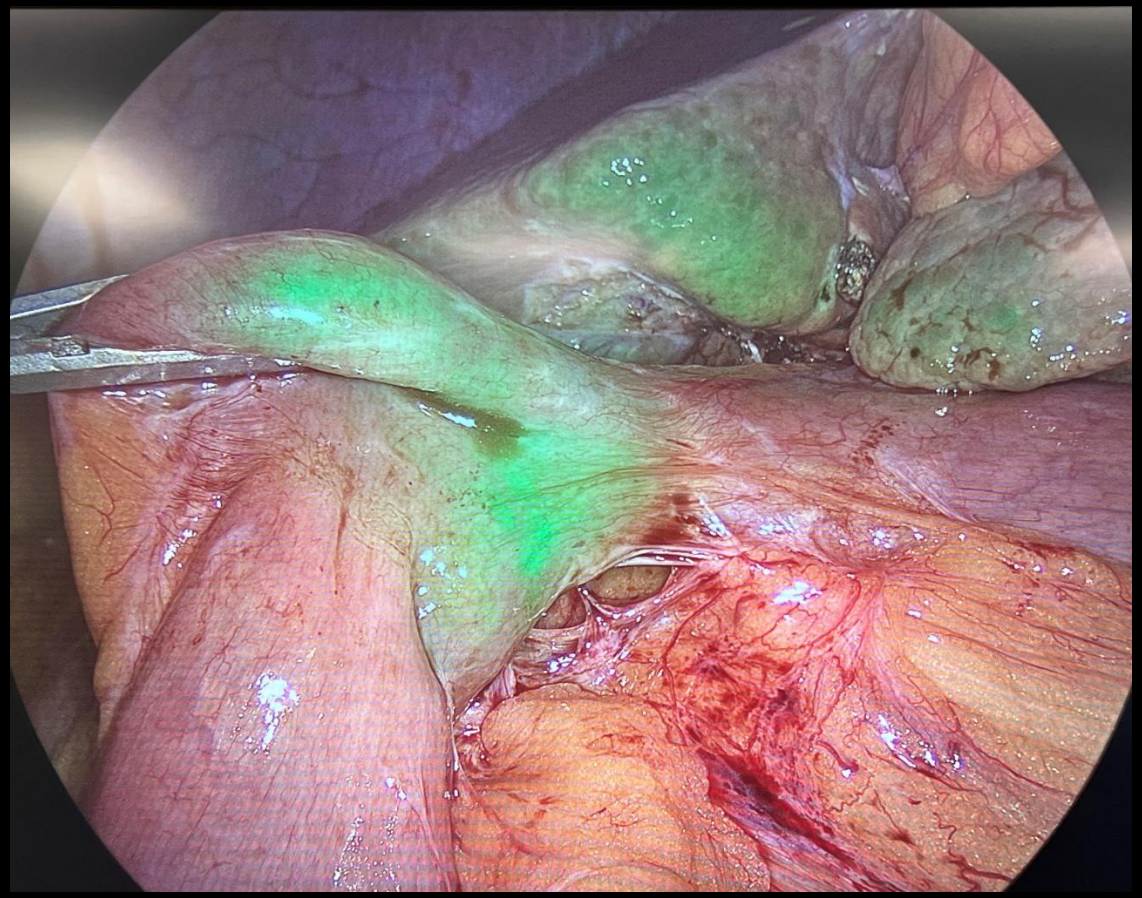


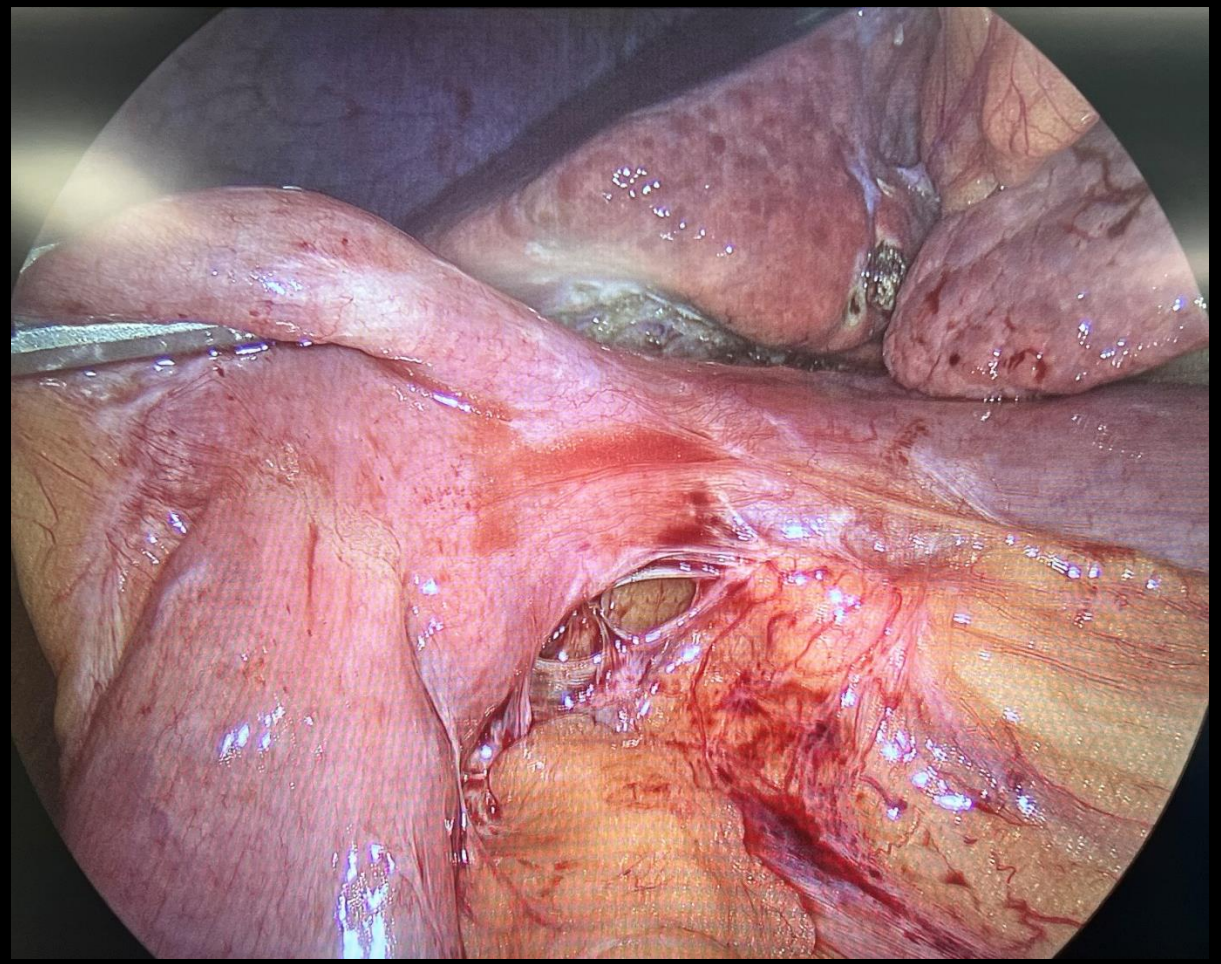
Laparoscopic View New Anastomosis
8 weeks





Bile Flow Across MAGDI Anastomosis at 8 Weeks





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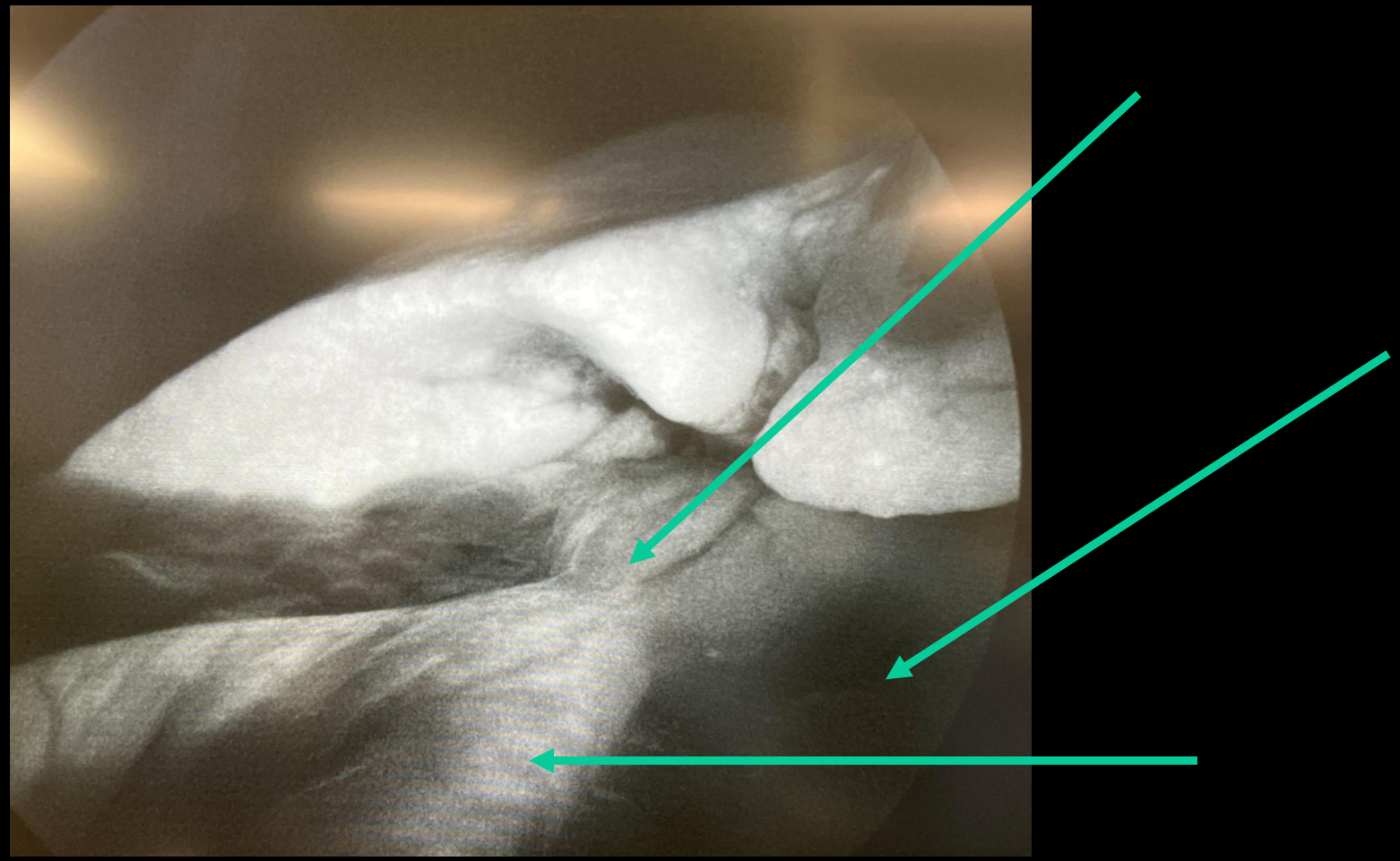
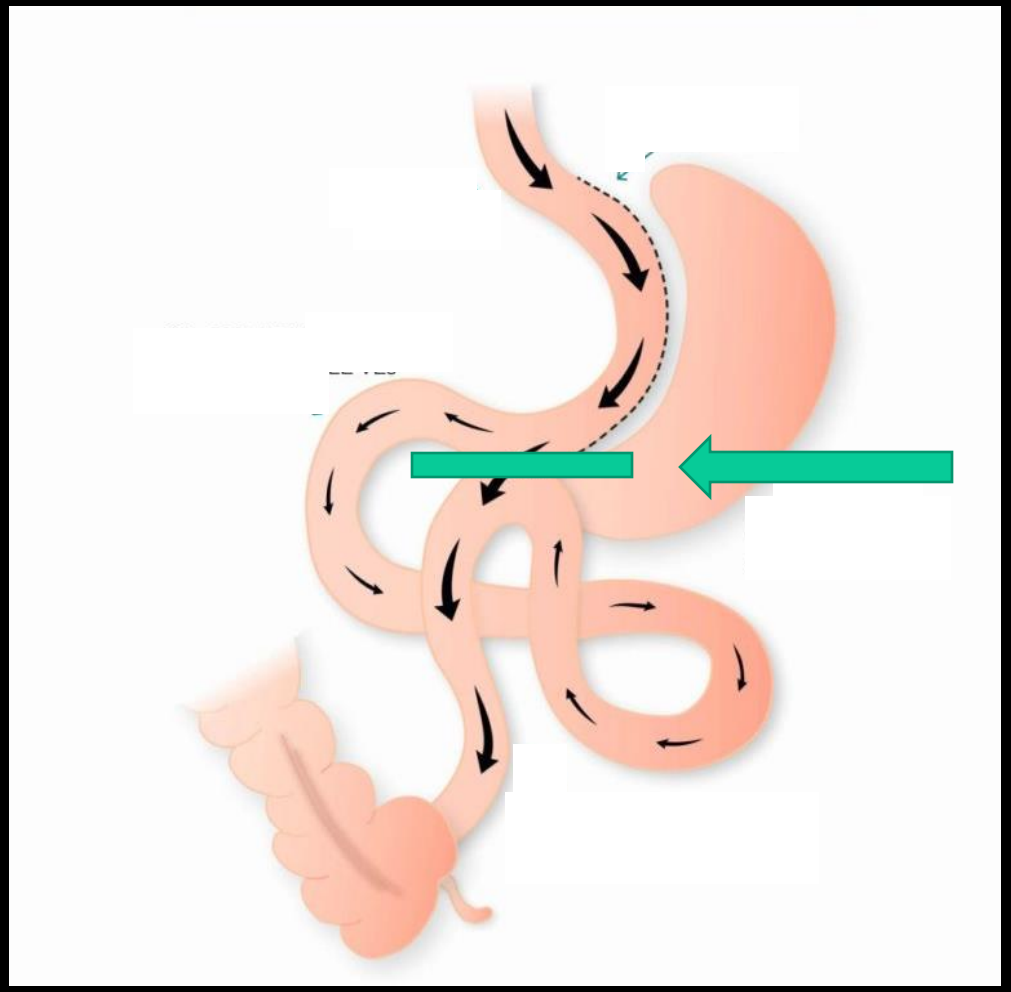
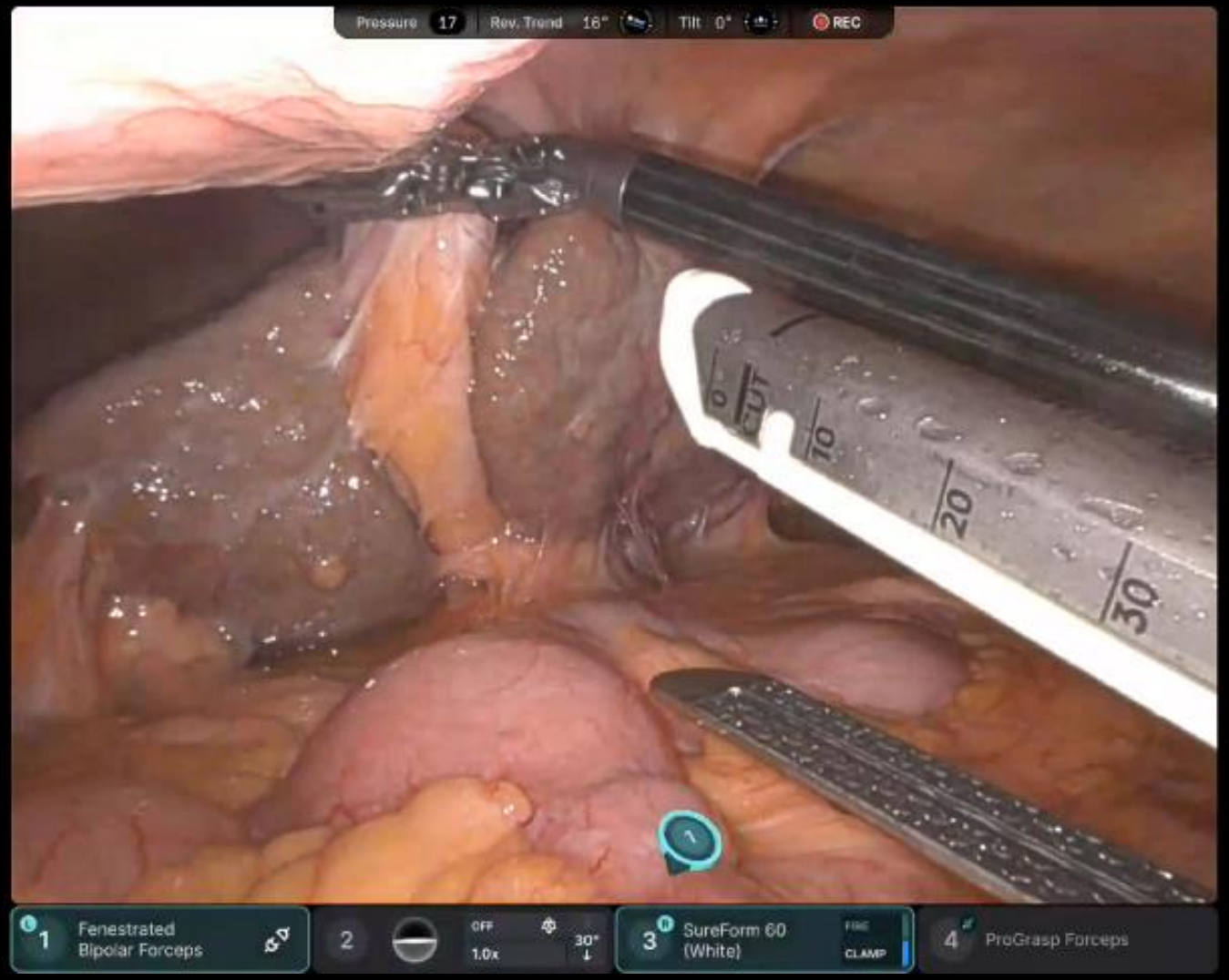


Easy to Reverse





Patient Selection

- Prioritize Patients who Desire Sleeve Gastrectomy
  - Easy to discuss “Sleeve Plus”
  - Lower BMI to Start
  - Revision Sleeve to Sleeve with Duodenal Ileostomy
- As Experience Grows …..
- Introduce DS and SADI patients to the staged approach
  - We are routinely doing patients with BMI over 60
  - Our heaviest so far was a BMI 73

Lessons Learned

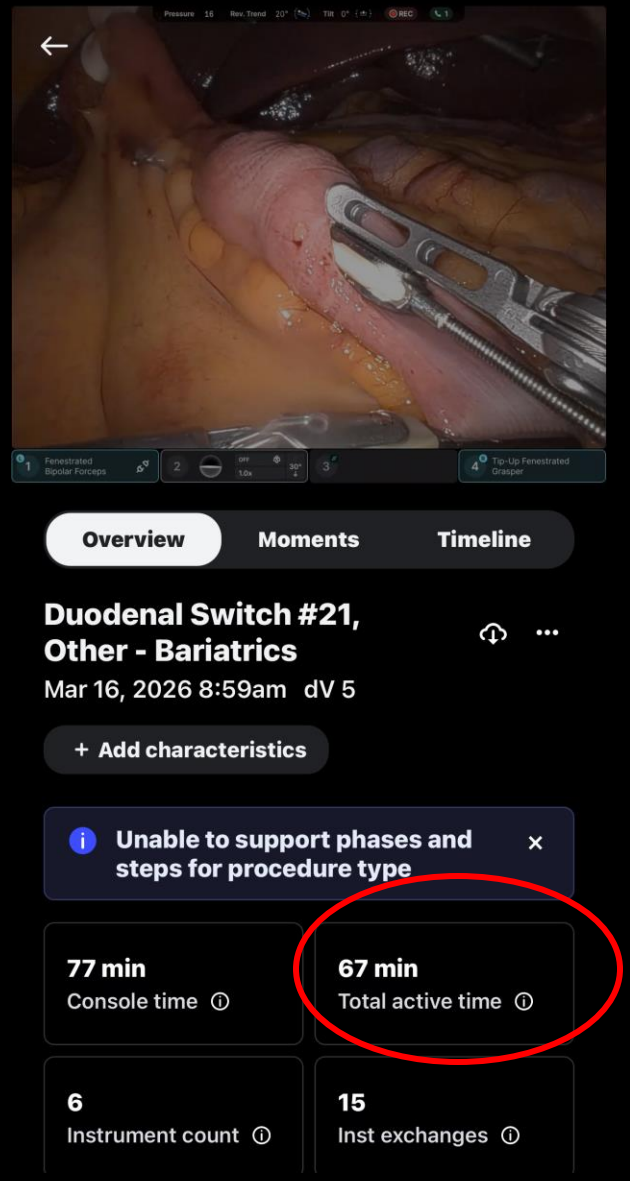
- Don’t take out the Gallbladder at the same time as MAGDI
- Encourage to mobilize the duodenum away from the porta hepatis. This helps reduce tension on the anastomosis
- Don’t be surprised if your first few patients come to the ED. The CT scan will always be read as if there is a partial bowel obstruction.
  - So far we have never had a true bowel obstruction
  - One patient had a kidney stone pass –ileus
- Post op x rays can be done at four week intervals
- I get a post op KUB the week of surgery to show initial magnet placement.

“Sleeve Plus”
14 Months post op

- BMI 24
- 112 pounds weight loss
- No vomiting
- No heartburn
- Sleeve with Magnetic duodenal ileostomy

Thank You


SAGES 2026


Overview
Moments
Timeline
Duodenal Switch #21, Other - Bariatrics
Mar 16, 2026 8:59am dV 5
+ Add characteristics
Unable to support phases and steps for procedure type
77 min
Console time
67 min
Total active time
6
Instrument count
15
Inst exchanges