



Magnetic Anastomosis

IFSO 2026 | Toronto | September 2, 2026

Megan Jenkins, MD
NYU Langone Health

Disclosures

- **Intuitive: Teaching**

Two clinical applications of magnetic compression

Diversion / bipartition

Adds a side-to-side pathway while the native route remains.

Purpose: partial diversion and metabolic effect.

The lumen forms over days with delayed-patency systems.

Examples: duodeno-ileal or jejuno-ileal bipartition

Primary Lumen Anastomosis (GI Windows Surgical)

Creates a required connection within a reconstructed pathway.

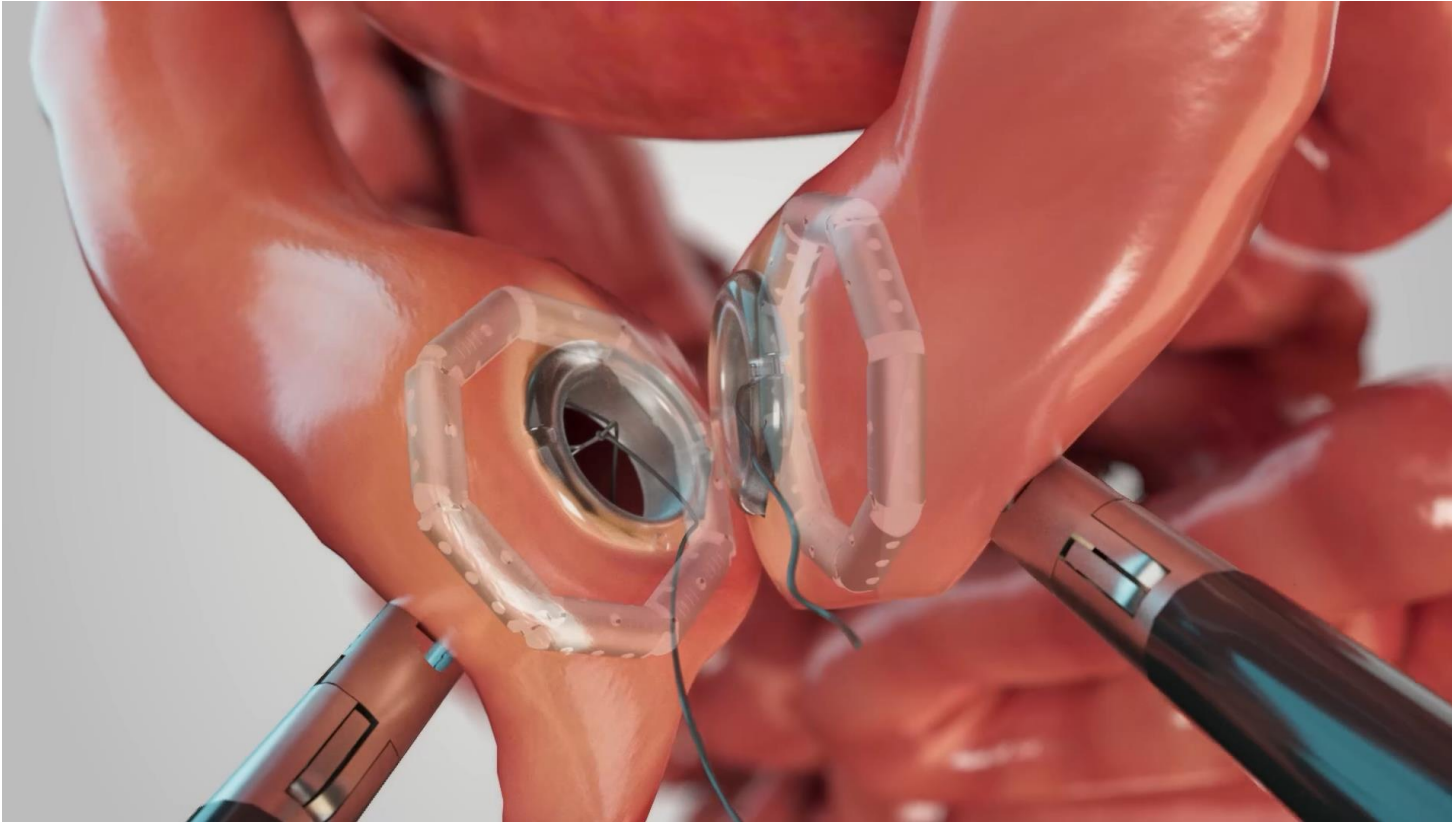
Purpose: restore flow during the index operation.

OTOLoc holds the enterotomy while healing proceeds.

Current GIW U.S. indication: Small bowel – Small bowel anastomosis with immediate lumen. Delayed DI anastomosis.

My current practice with GI Windows Surgical Flexfire Universal platform

GI Windows Surgical – Immediate Lumen Anastomosis



- 1 Position**
Deploy OTOLoc and magnets
- 2 Dock**
Couple the magnets
- 3 Compress**
Uniform magnetic compression
- 4 Immediate Lumen**
Form an immediate patent anastomosis without a retained implant

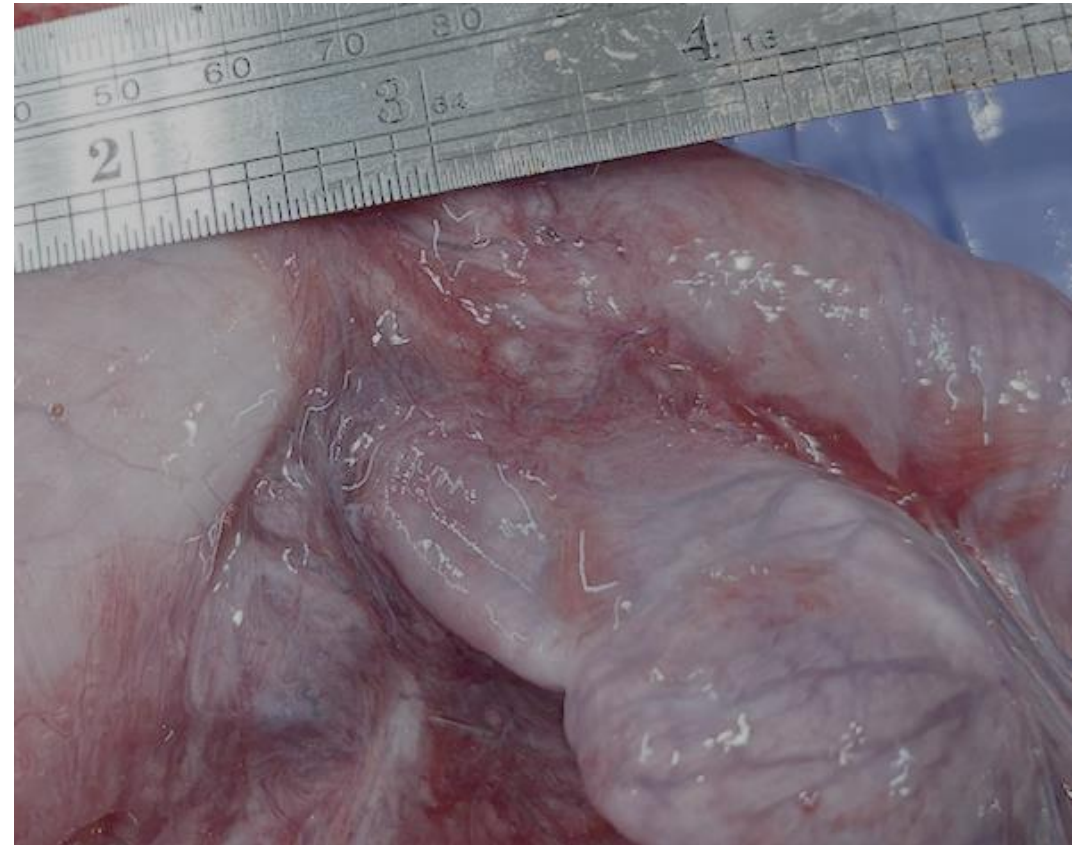
Immediate patency supports reconstructive continuity while compression-mediated healing proceeds.

A Visible Difference in Tissue Response

GI Windows Magnetic Compression Anastomosis



Conventional Stapled Anastomosis



GI Windows Surgical System Components

Core Compression Engine



Flexagon
25mm Outside Diameter
✓ FDA
Cleared



Megagon
28mm Outside Diameter

Delivery Modalities



Laparoscopic Delivery

✓ FDA
Cleared



Transrectal Delivery



Endoluminal Delivery

✓ FDA
Cleared

Immediate Lumen & Accessories



OTOLoc

✓ FDA
Cleared



Cartridges

✓ FDA
Cleared

MCA Creates a Different Healing Environment

01

Mechanical Environment

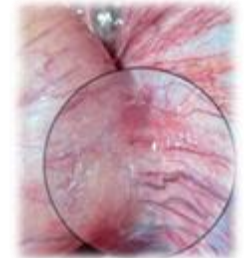
- Uniform compression,
- No staple/suture penetration points
- No permanent foreign material



02

Biological Response

- Preserved microvascular perfusion
- Reduced focal ischemia
- Compression-mediated hemostasis



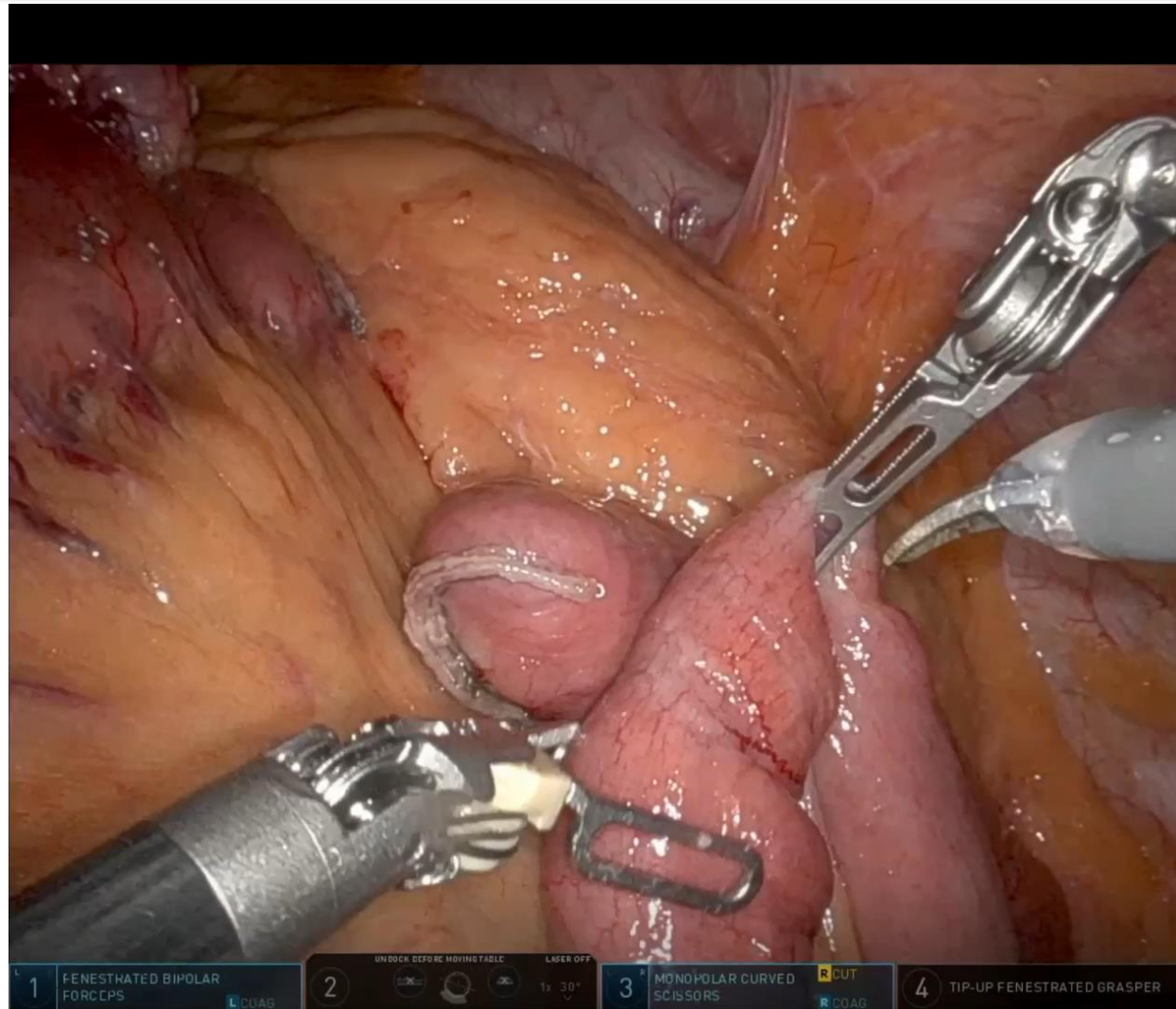
03

Healing Profile

- Consistent, immediate lumen
- Minimal foreign body response
- Organized tissue remodeling

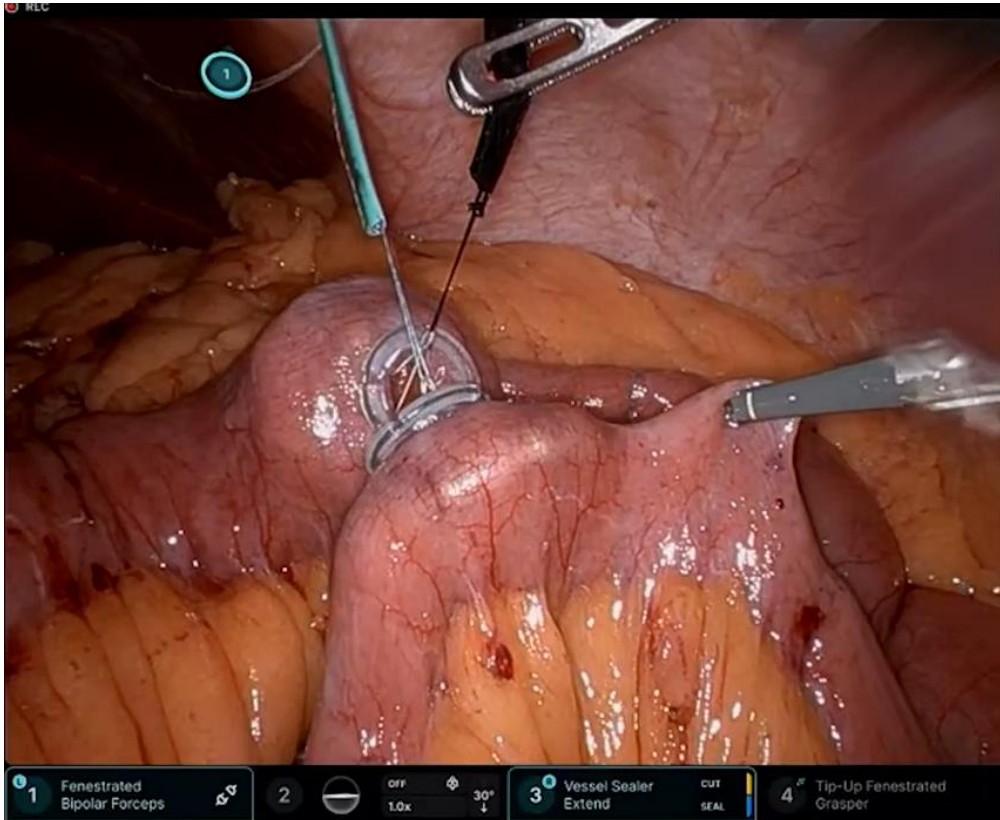


GI Windows In Clinical Practice: 4-minute anastomosis (with Resident)

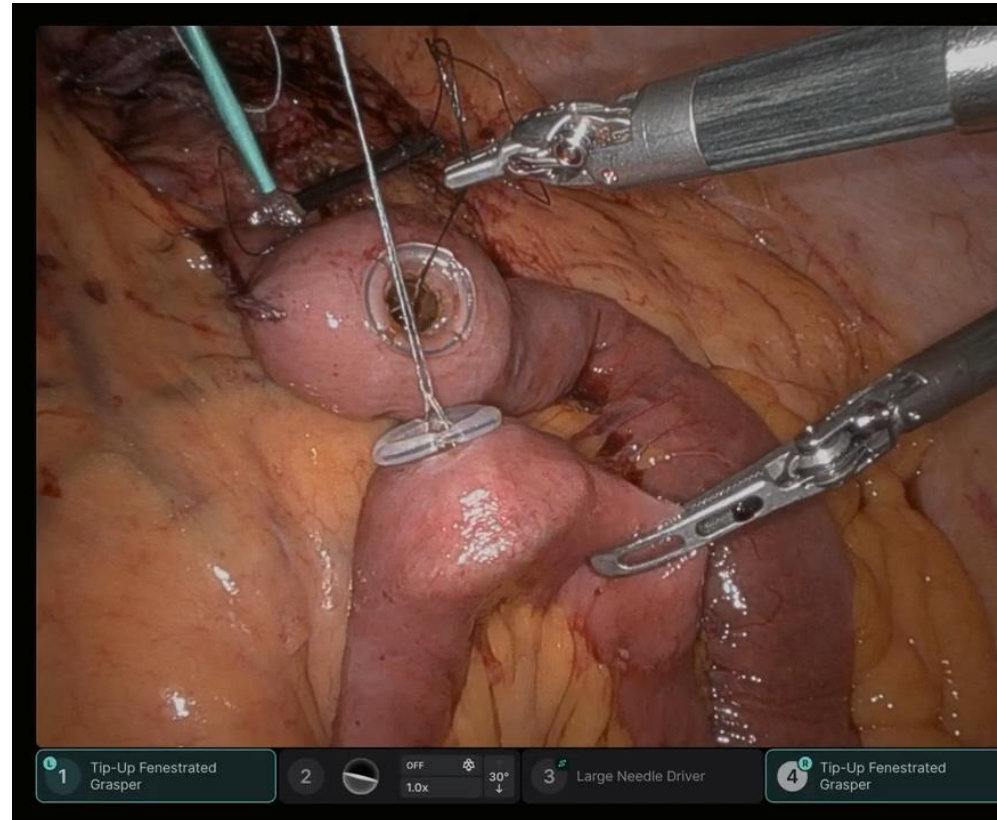


GI Windows Efficiency and Standardization

2 Surgeons. Different levels of experience, same outcomes



Surgeon A: 5 Years Experience
🕒 4 min. anastomosis



Surgeon B: 15 Years Experience
🕒 5 min. anastomosis

FLOWS: short-term small-bowel feasibility and safety

PRIMARY ENDPOINT

79 / 79

Immediate lumen, without specified related reoperation at 30 days

DESIGN

Prospective, 6 U.S. centers, single arm

POPULATION

79 adults undergoing laparoscopic small-bowel anastomosis

REPORTED SAFETY

No leak, bleed, obstruction, re-intervention or death. 4 SAEs; none serious device-related

LIMITS

No concurrent comparator; 30-day primary endpoint

Interpretation: strong single-arm feasibility signal

Teixeira et al. Surg Endosc. 2026. Prospective, multicenter, single-arm study.

Select Clinical Evidence Across the Platform

Application	Evidence Type	Patients	Status / Signal
Small Bowel	FLAWS-SB Trial U.S. multi-center clinical trial S. Endoscopy, 2026	79 patients	Clinical foundation for small bowel MCA
Colorectal	First-in-human Single-center feasibility experience <i>Diseases of the Colon & Rectum, 2026</i>	25 patients	Early feasibility evidence supporting colorectal expansion
Bariatrics	MAPS – Gastric Trial U.S. multi-center clinical trial (<i>Manuscript in progress</i>)	85 patients	Growing real-world experience in gastric anastomosis within bariatric workflow
Metabolics	Long-term follow-up Bipartition + partial J-Diversion <i>GUT / Obesity Surgery / EIO</i>	3-4 yr Follow-up	Durability signal across metabolic applications

Future Looking...

CLEARED IN THE U.S.

Small bowel reconstruction

Side-to-side JJ and II
Adults older than 21

In Progress

Gastric reconstruction

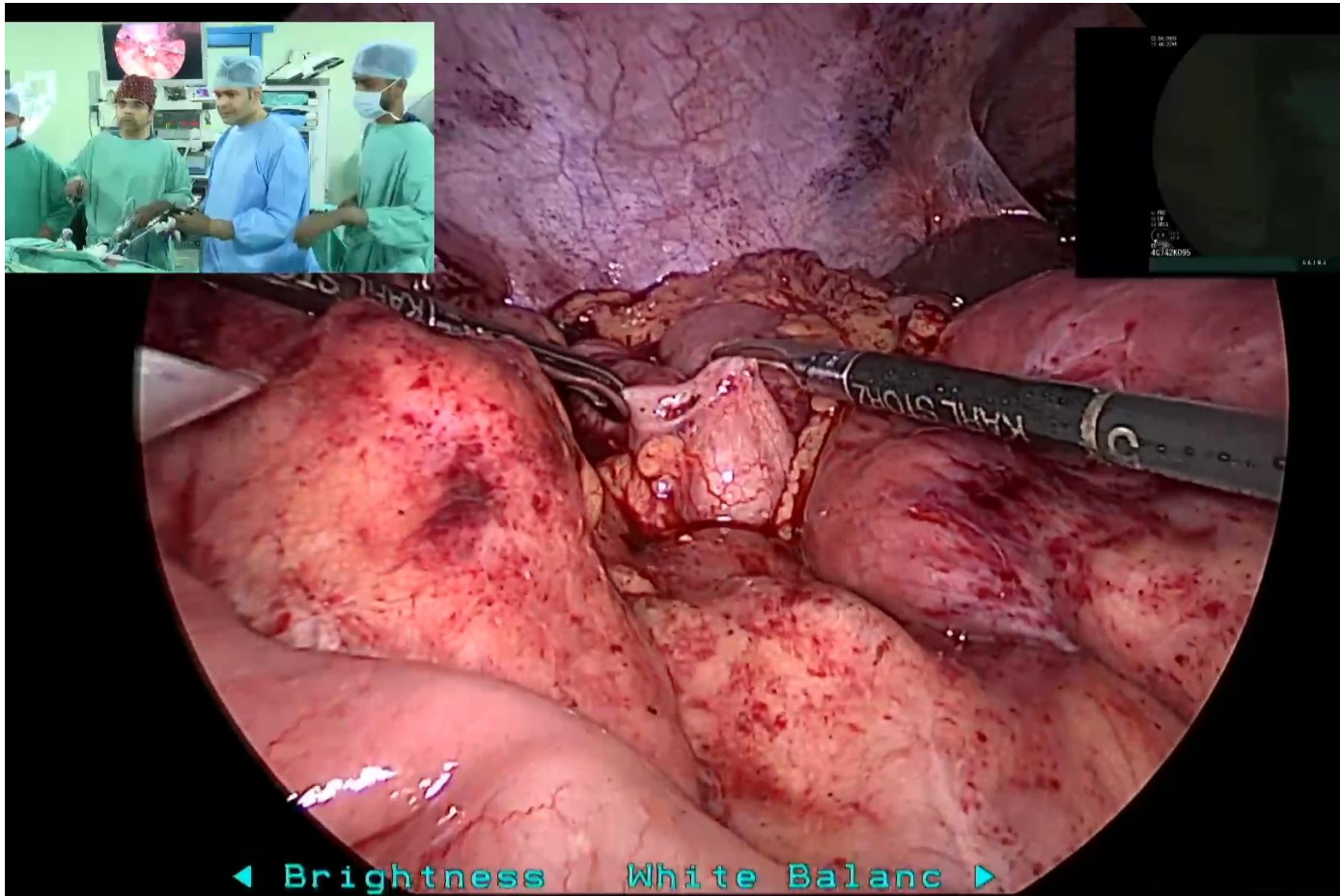
Gastrojejunostomy
MAPS multicenter single-arm
study

In Progress

Colorectal reconstruction

Ileocolic, colocolonic and
colorectal

Future Looking...



In Progress

Colorectal Reconstruction

Multi-center clinical trials underway for expanded indications

Four take-home messages (In my practice)

01

Standardization

Consistent circumferential anastomosis has reduced variability in time and outcomes across all operators

02

Efficiency

A simplified, repeatable workflow has meaningfully reduced anastomosis times, even in JJ anastomosis

03

Outcomes

GI Windows magnetic compression anastomosis has show promising outcomes with respect to leaks, bleeds and strictures.

04

Patency Matters

Immediate lumen makes this more applicable to my practice and expands what's possible across the entire GI tract