

Endoscopic Sleeve Gastroplasty: Suturing Pattern and APC

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Disclosures

Consultant: Boston Scientific, Olympus, Intuitive

Co-inventor (Licensed Mayo Technology): Endogenex

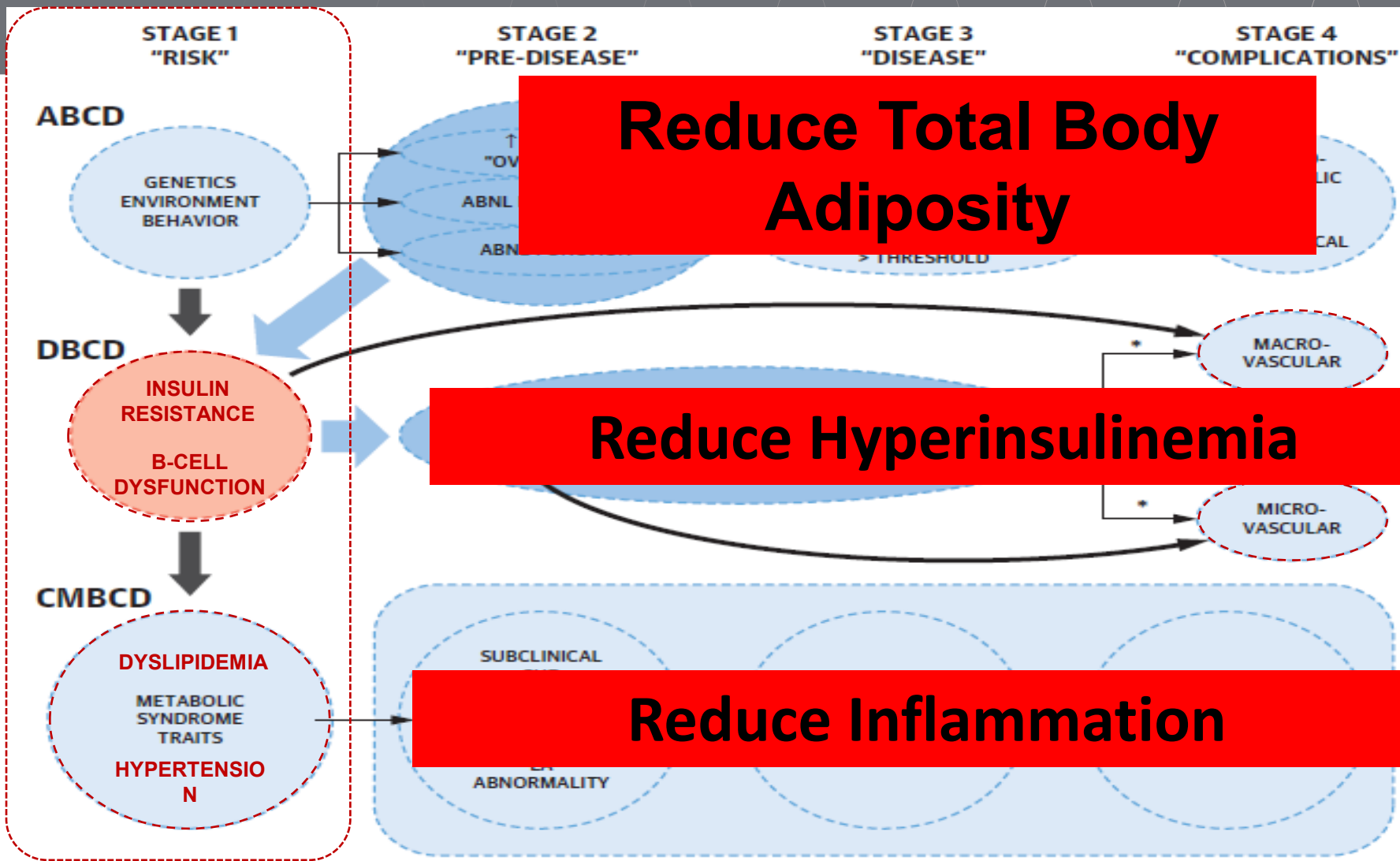
Research Support: MERIT Medical

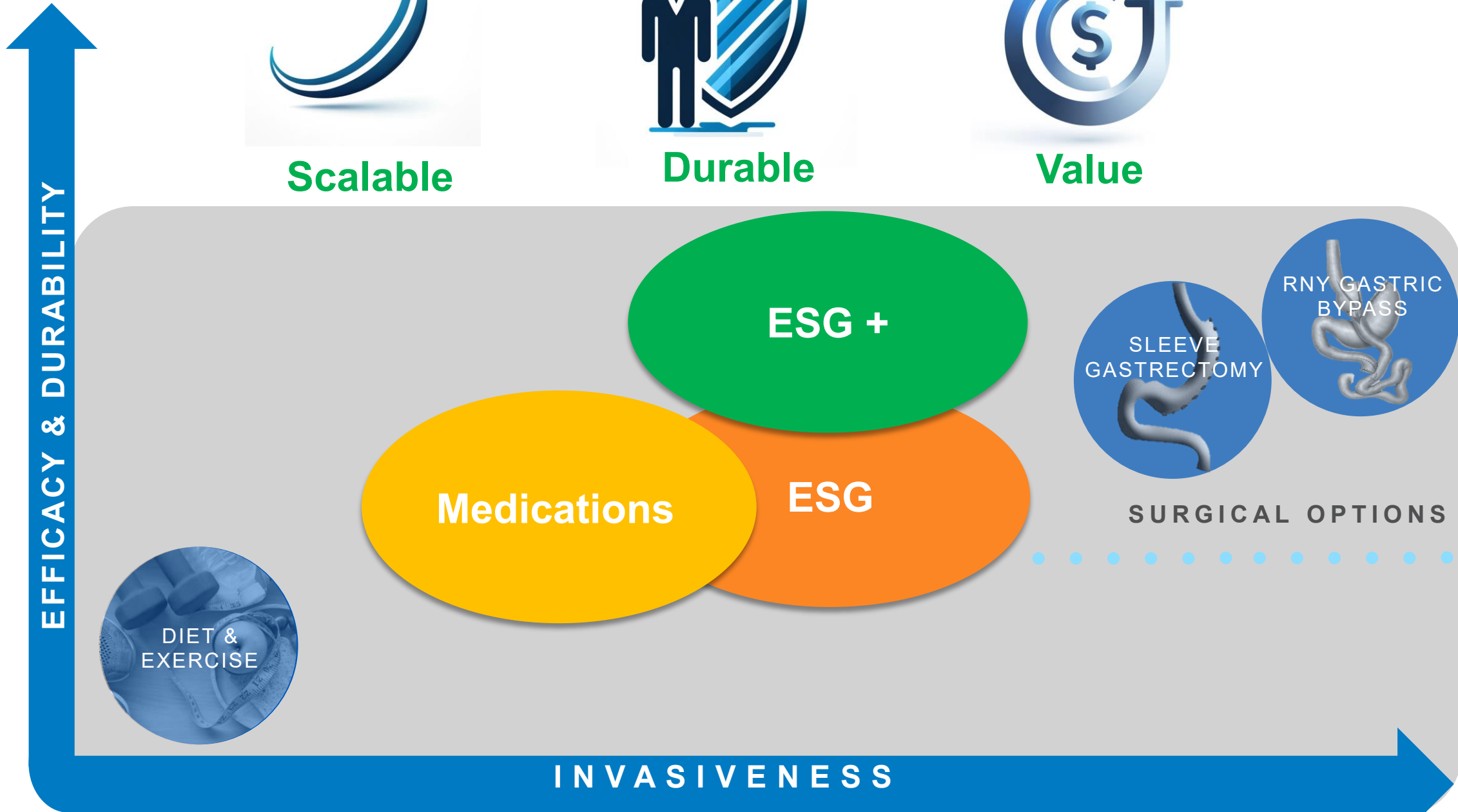
The ABCD, DBCD and CMBCD Models

++ ESG

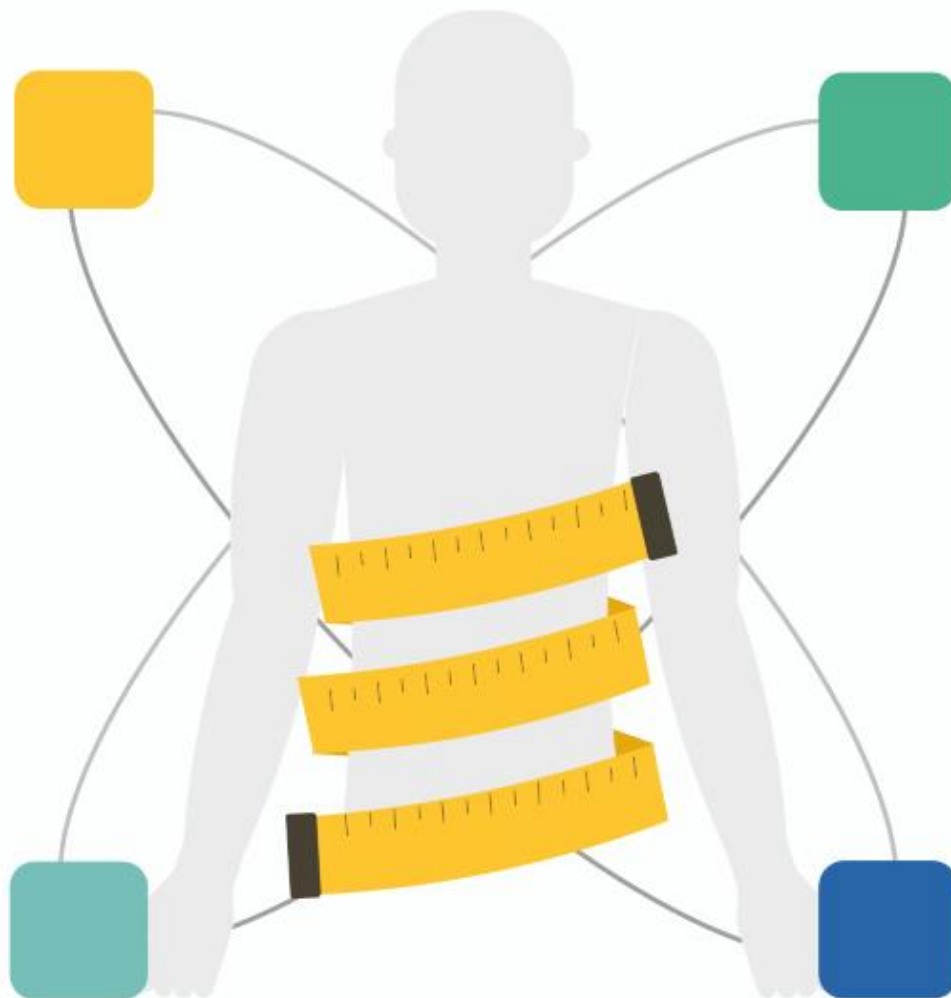
++ Duodenal
Regeneration

++ Duodenal
Regeneration





**Organ
Sparing**

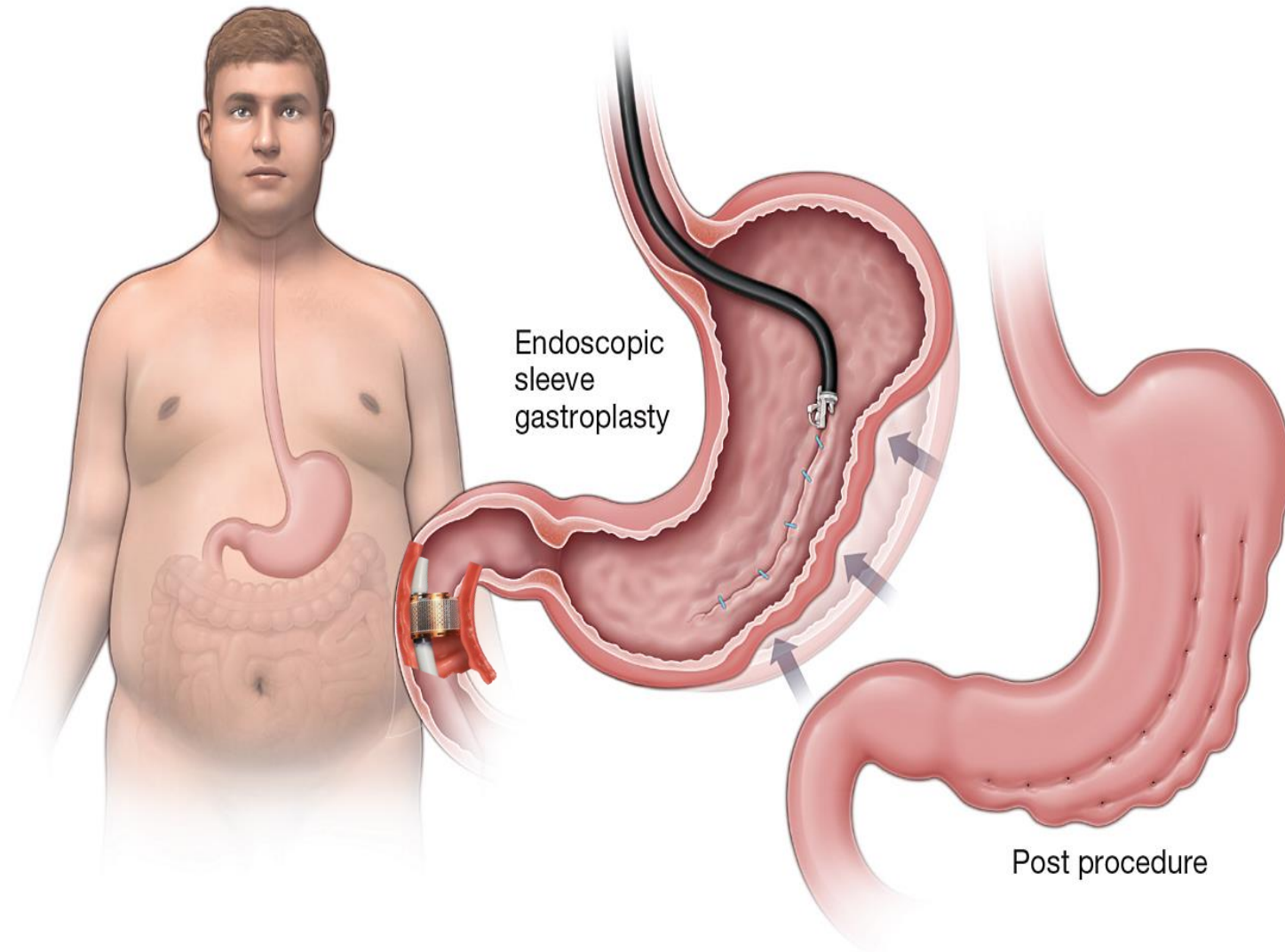


**Safe
Effective**

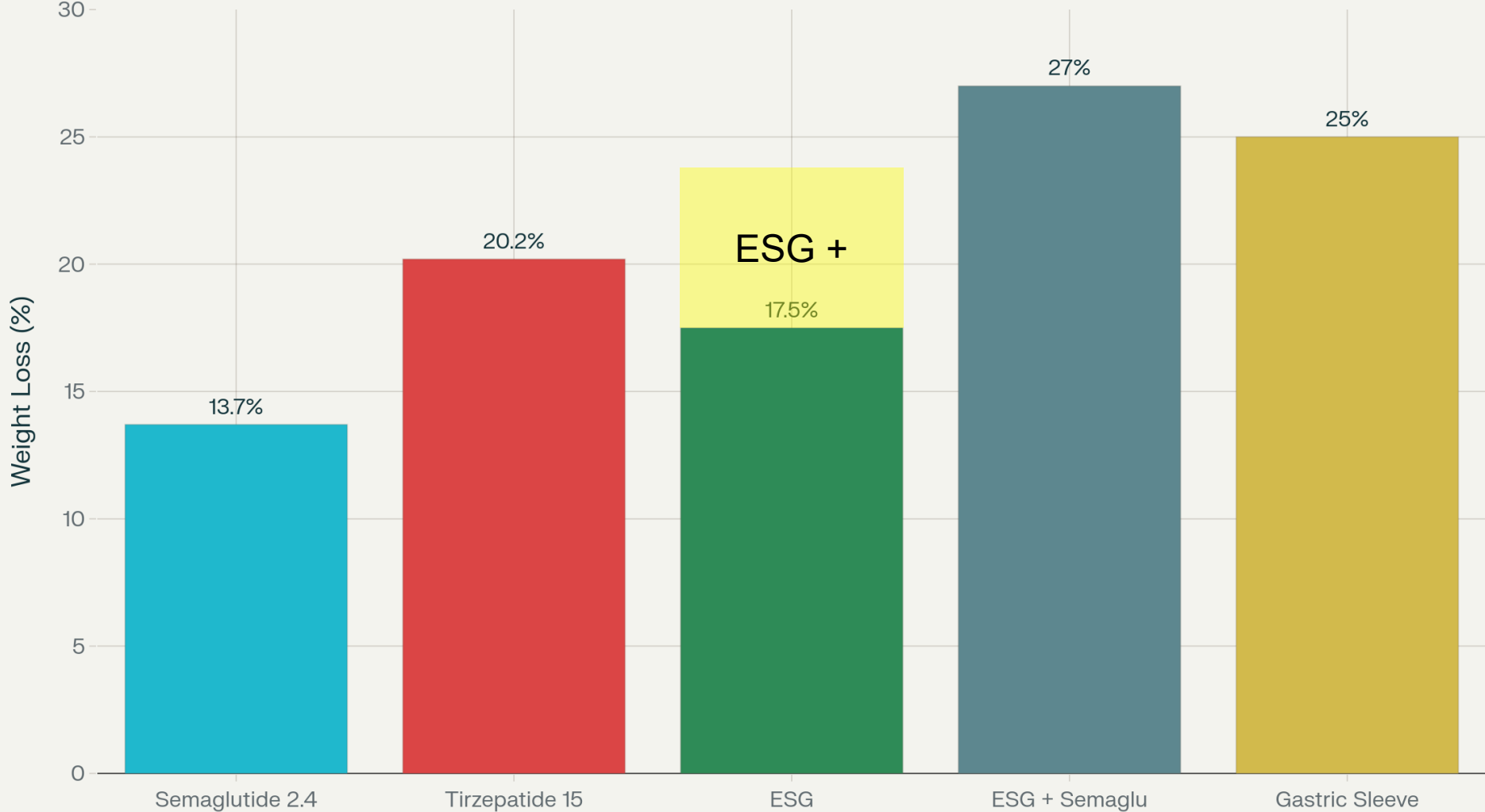
**No Long-Term
Consequences**

**Minimal
Disruption**

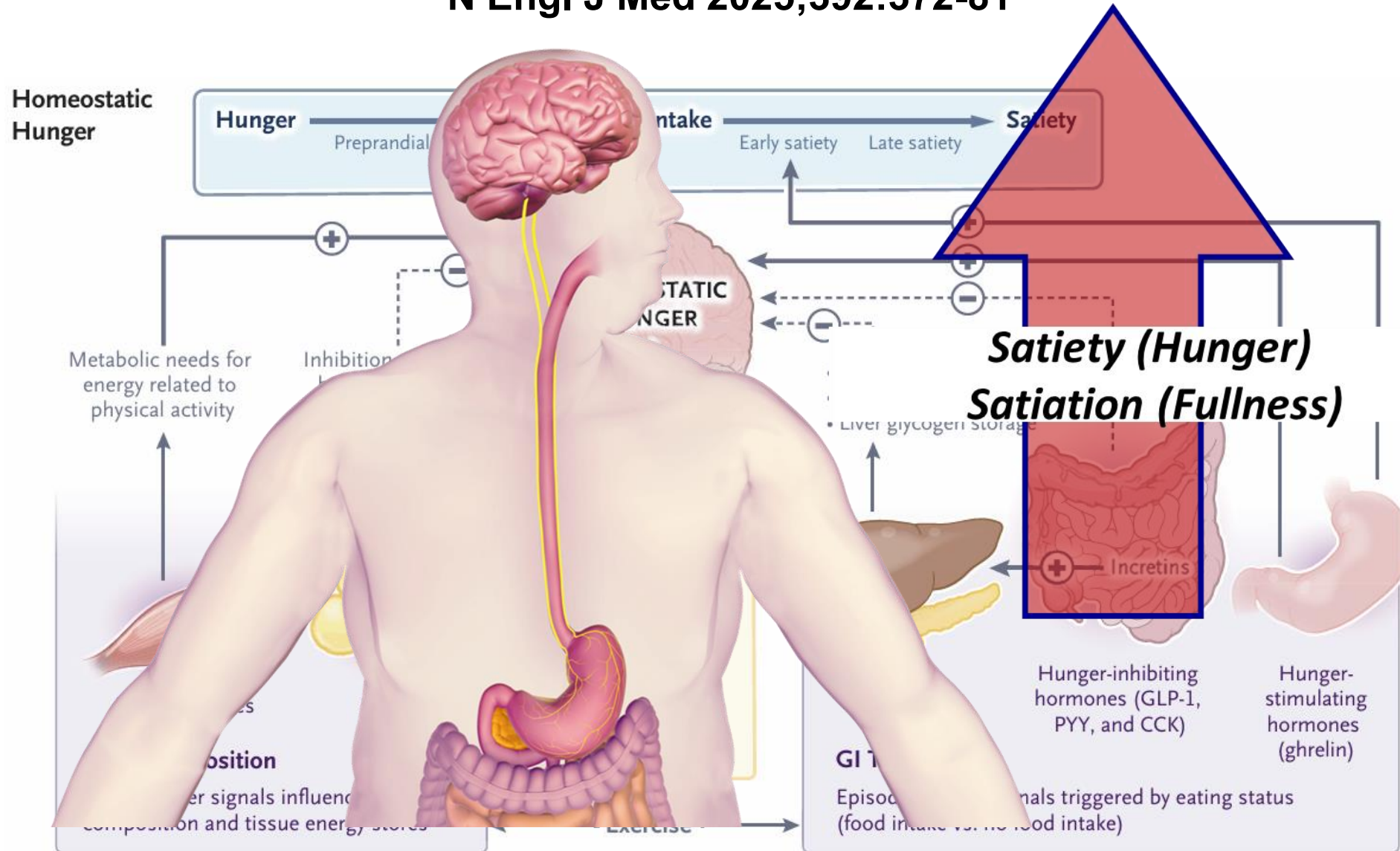
ESG + DUODENAL REGENERATIVE THERAPIES

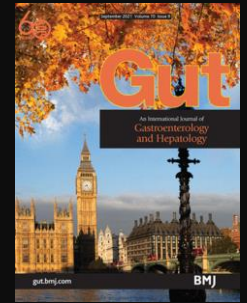
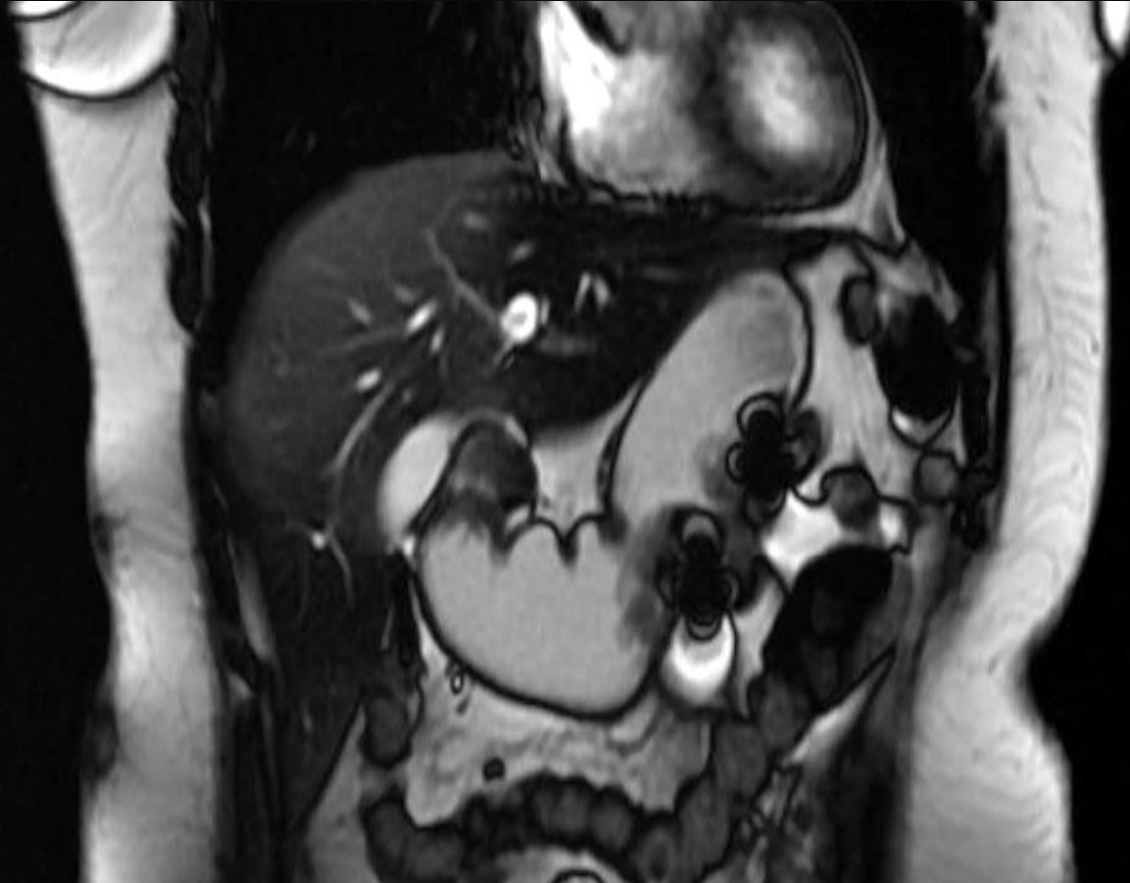


12-Month Weight Loss Outcomes








N Engl J Med 2025;392:372-81





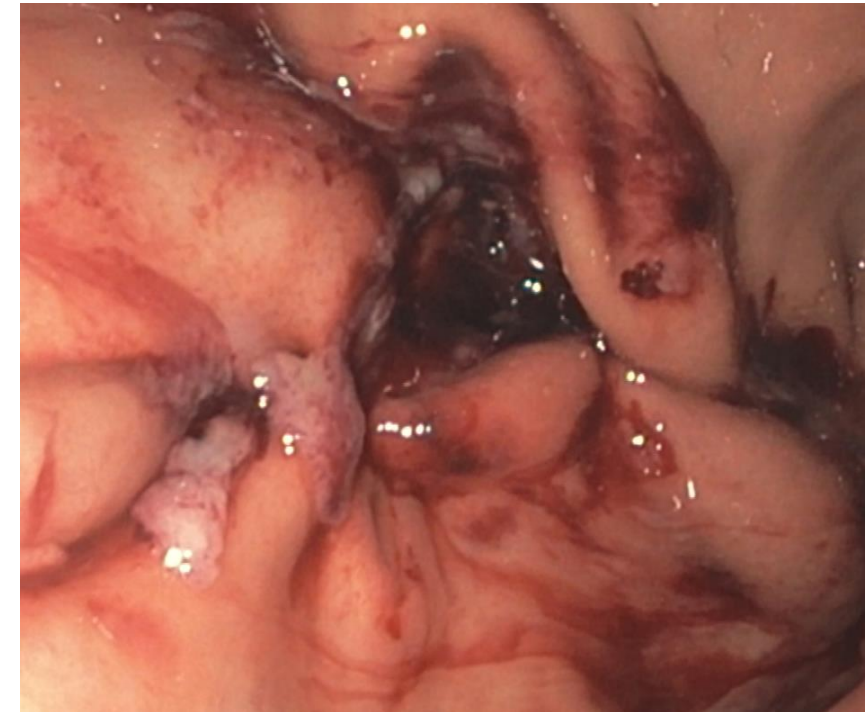
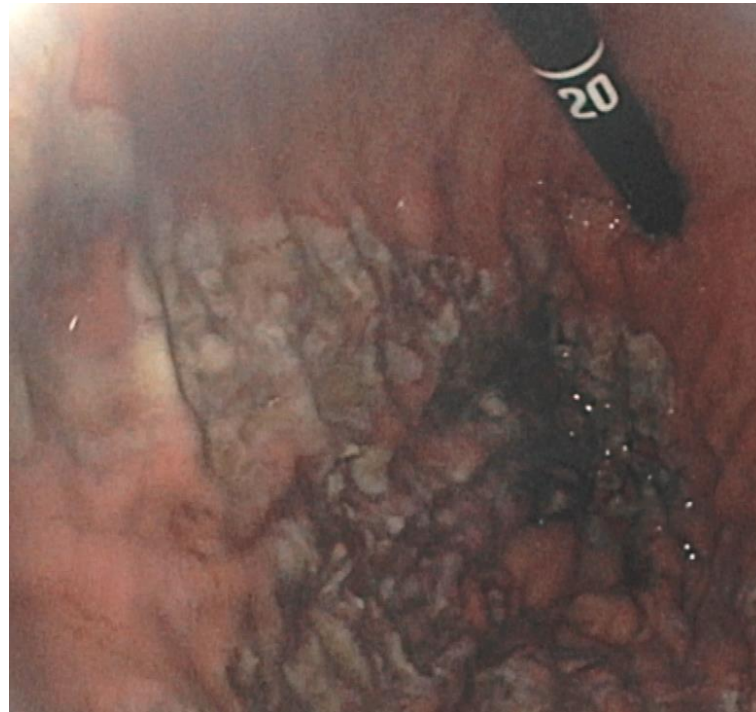
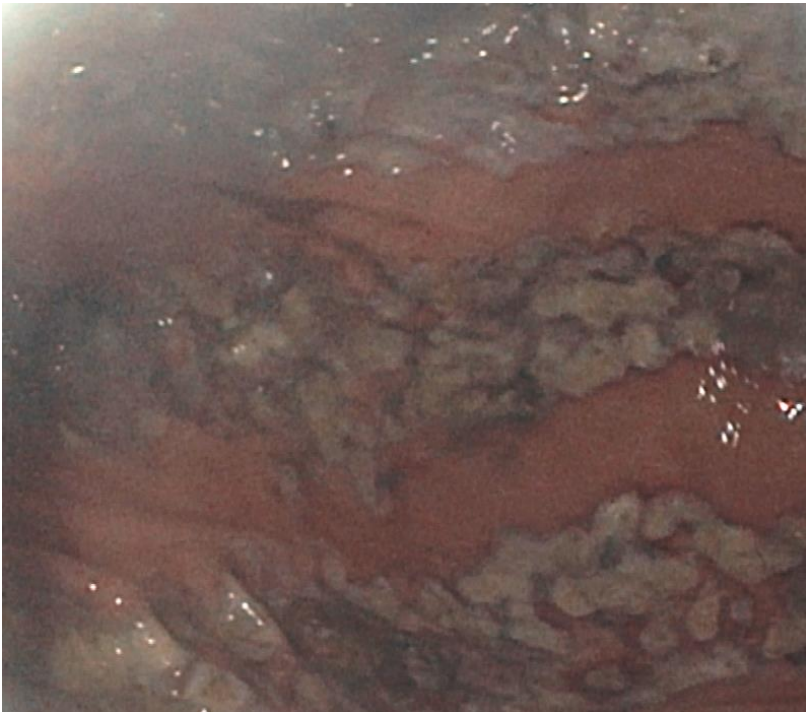
Original research

Effect of endoscopic sleeve gastroplasty on gastric emptying, motility and hormones: a comparative prospective study

Eric J Vargas ,¹ Monika Rizk,¹ Jacky Gomez-Villa,¹ Phillip K Edwards,² Veeravich Jaruvongvanich,¹ Andrew C Storm,¹ Andres Acosta ,¹ David Lake,² Jeff Fidler,³ Adil E Bharucha ,¹ Michael Camilleri ,¹ Barham K Abu Dayyeh ¹

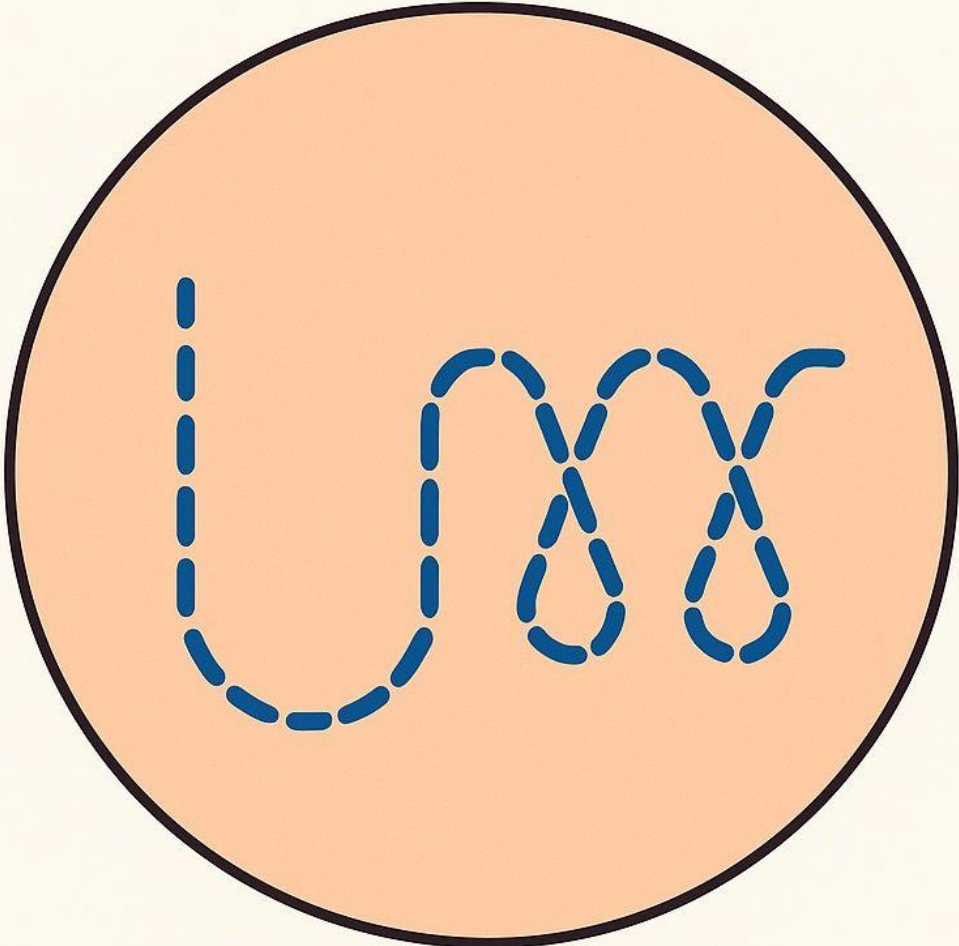
ESG + APC

Wide-field HAPC from fundus to incisura
Interlocking suture pattern



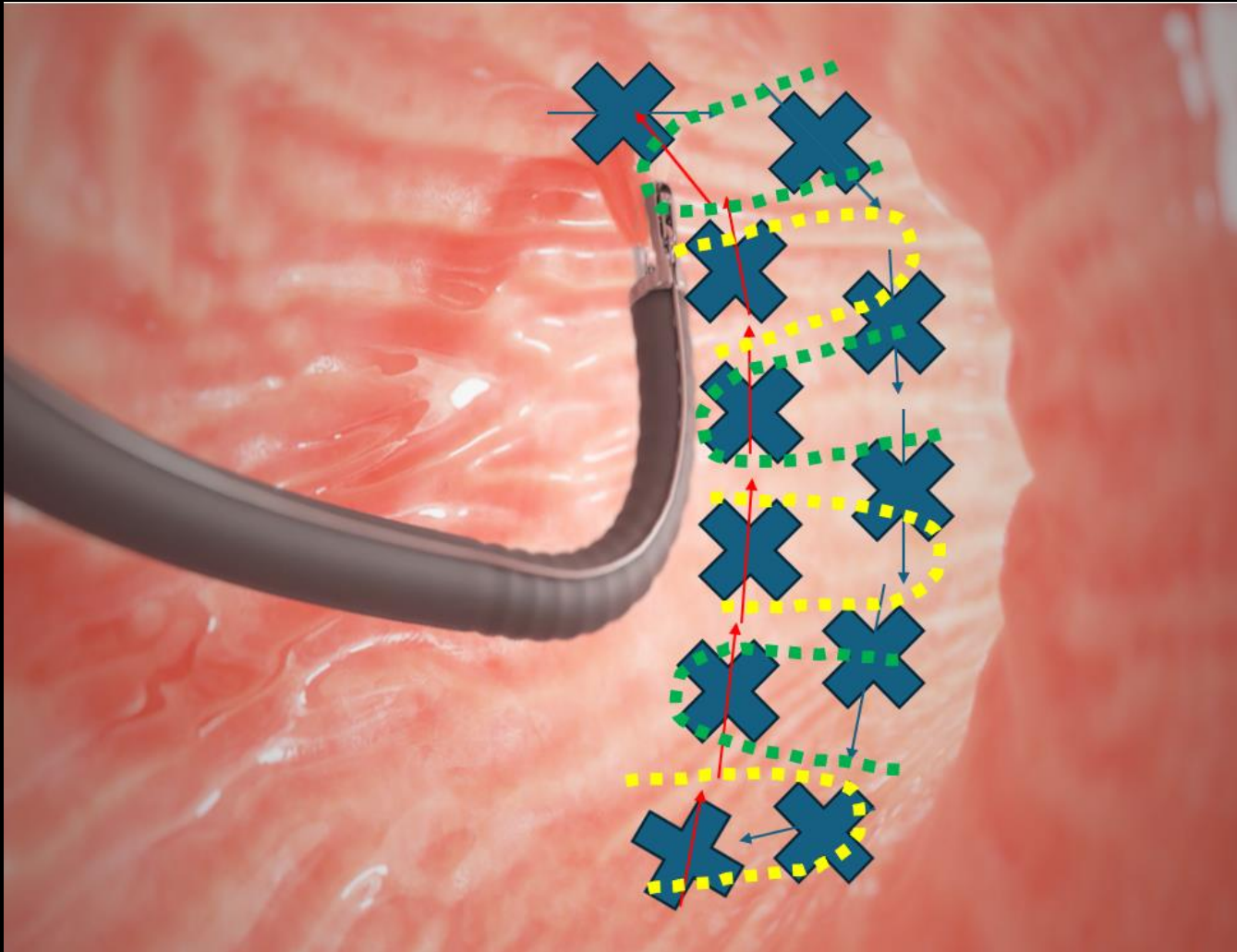
Interlocking ESG

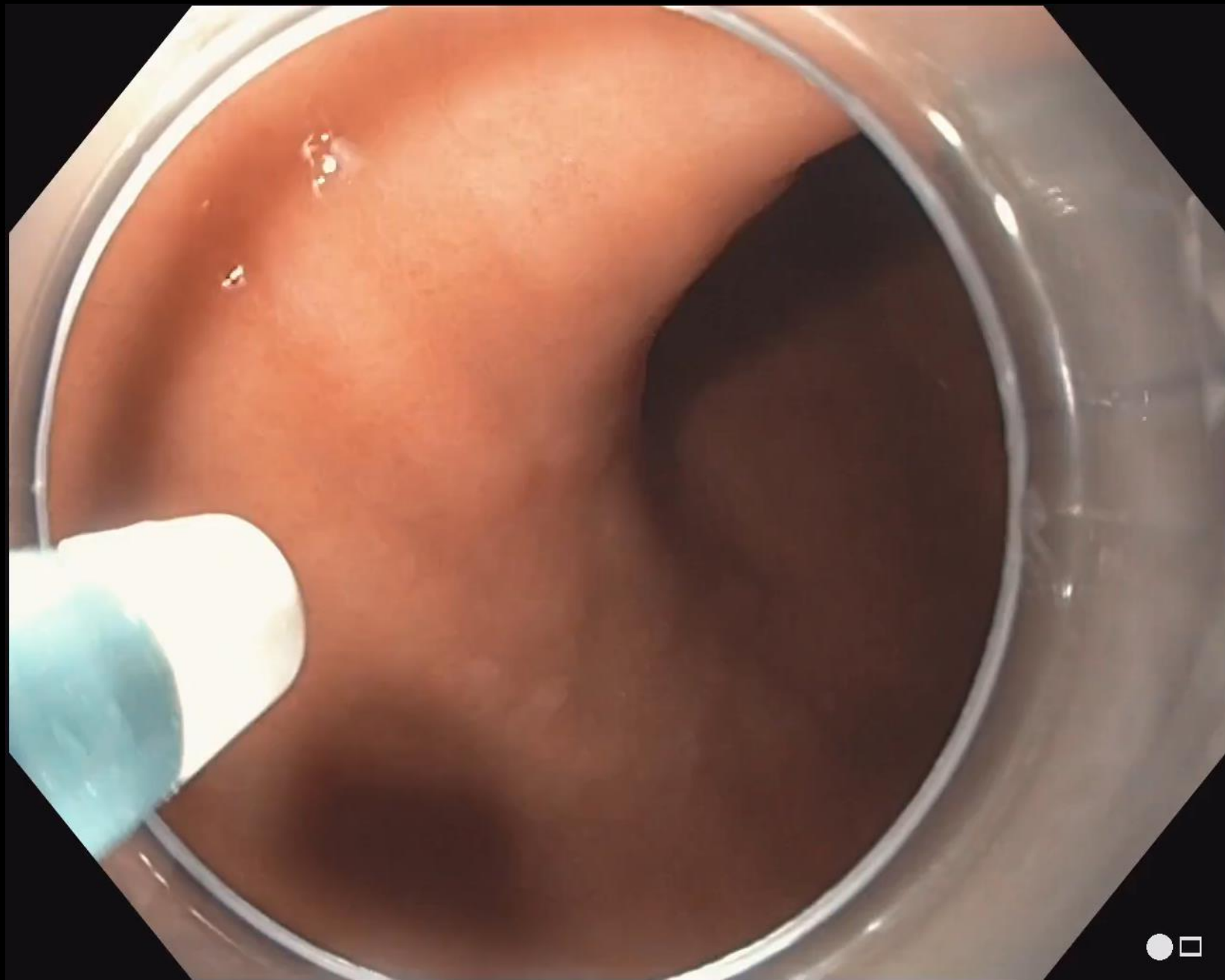
Interlocking ESG (iESG)

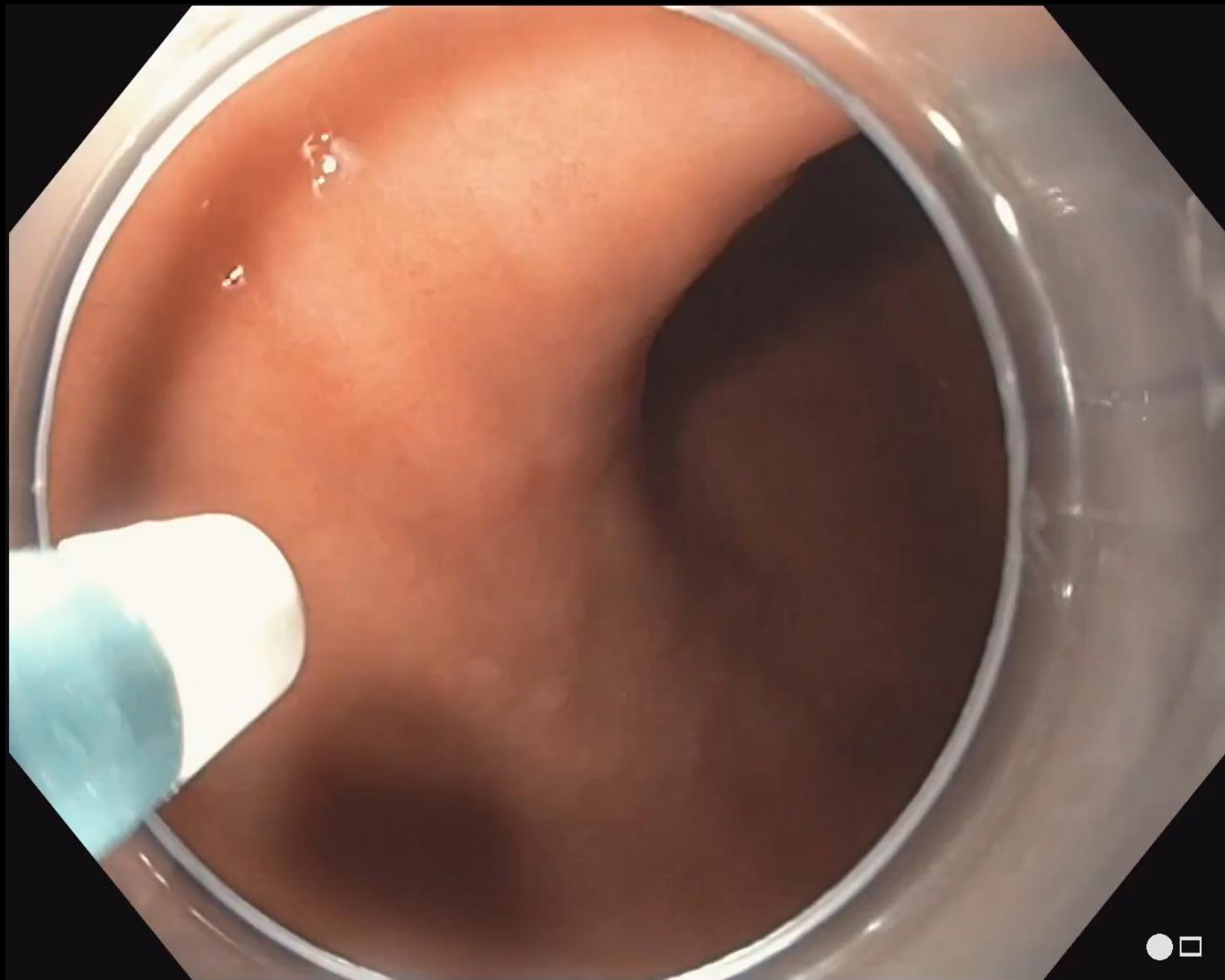


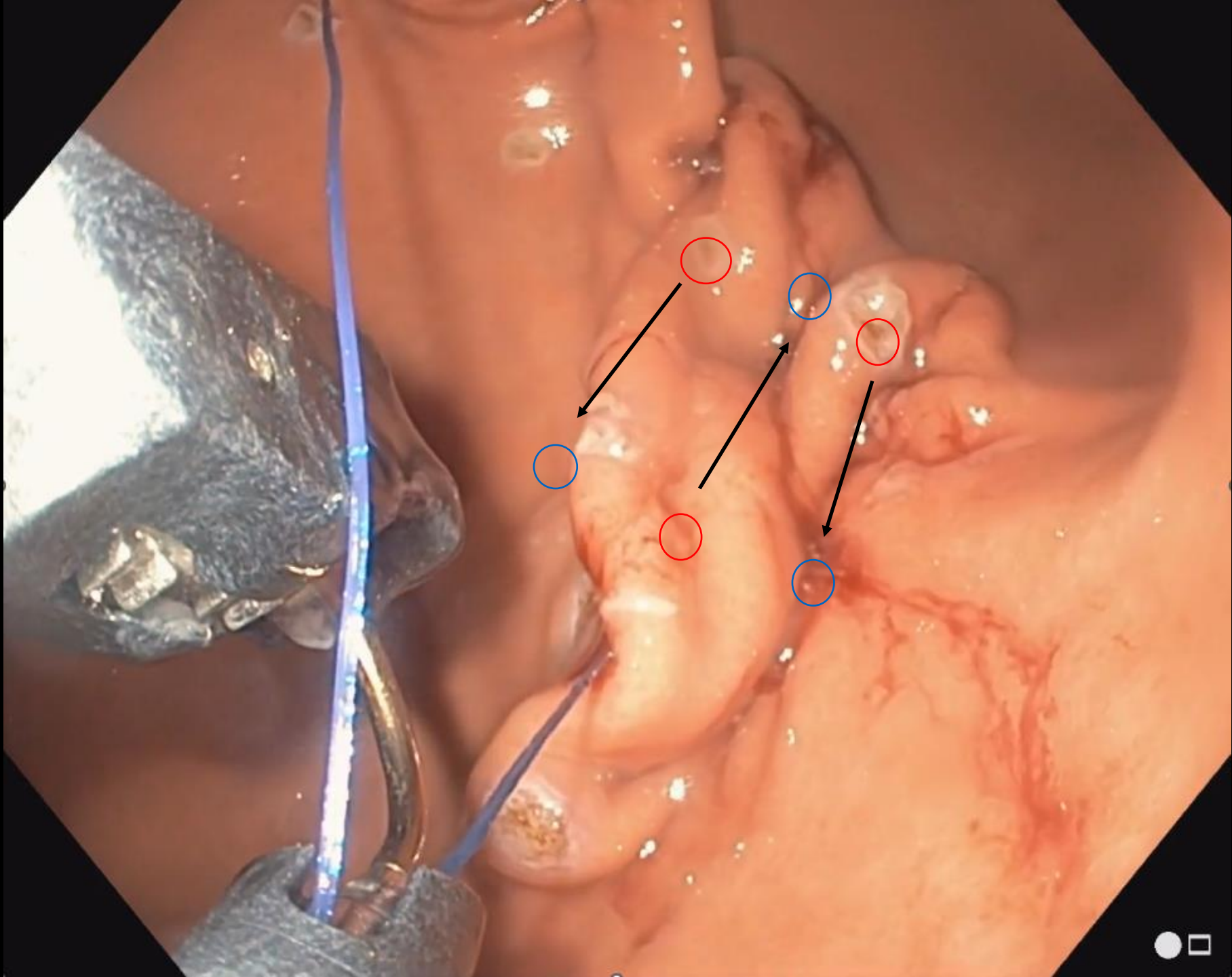
**Interlocking Endoscopic Sleeve
Gastroplasty (iESG) Using a Next-
Generation Suturing Device**

First Two Interlocking Layers of Peaks and Valleys (Base)

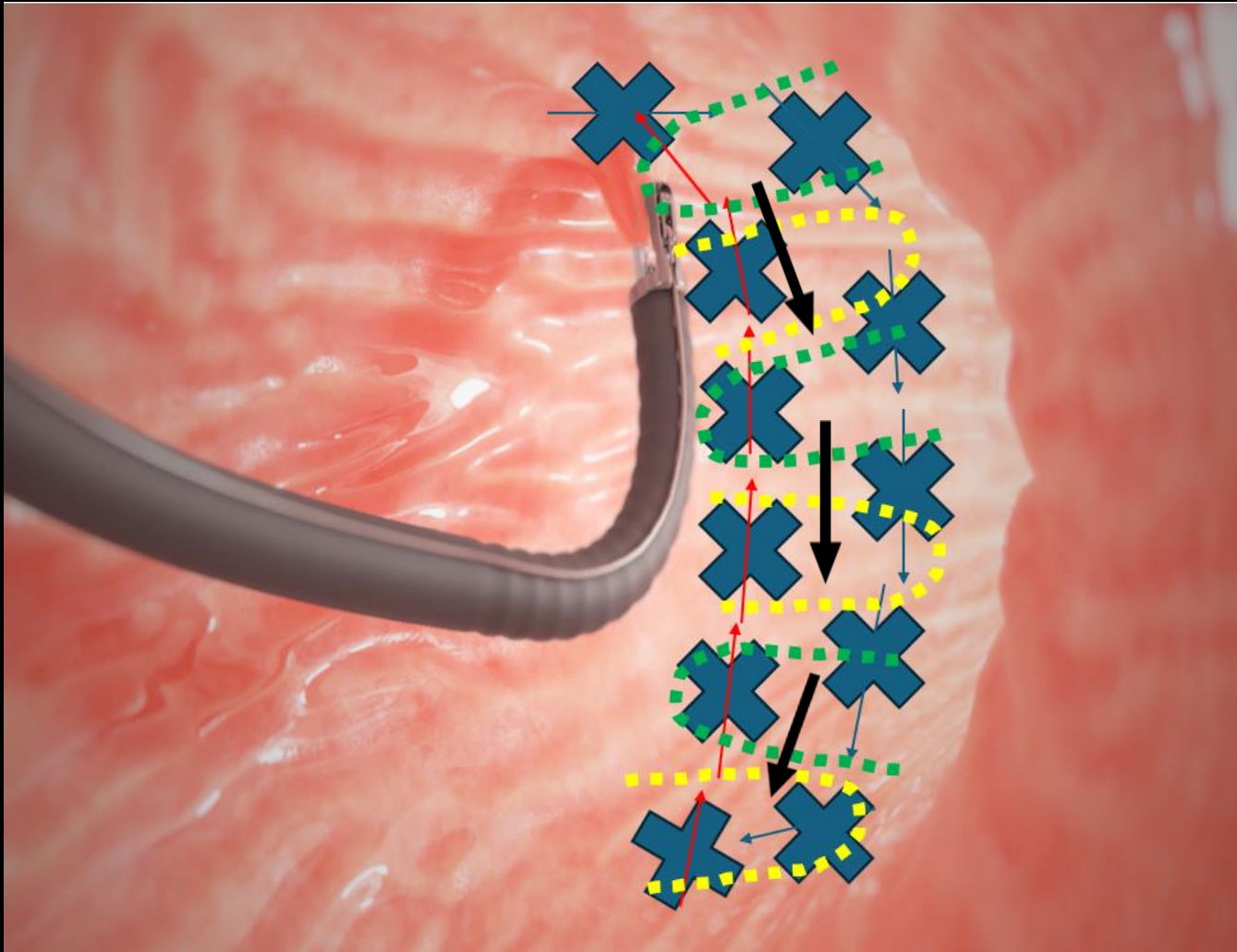






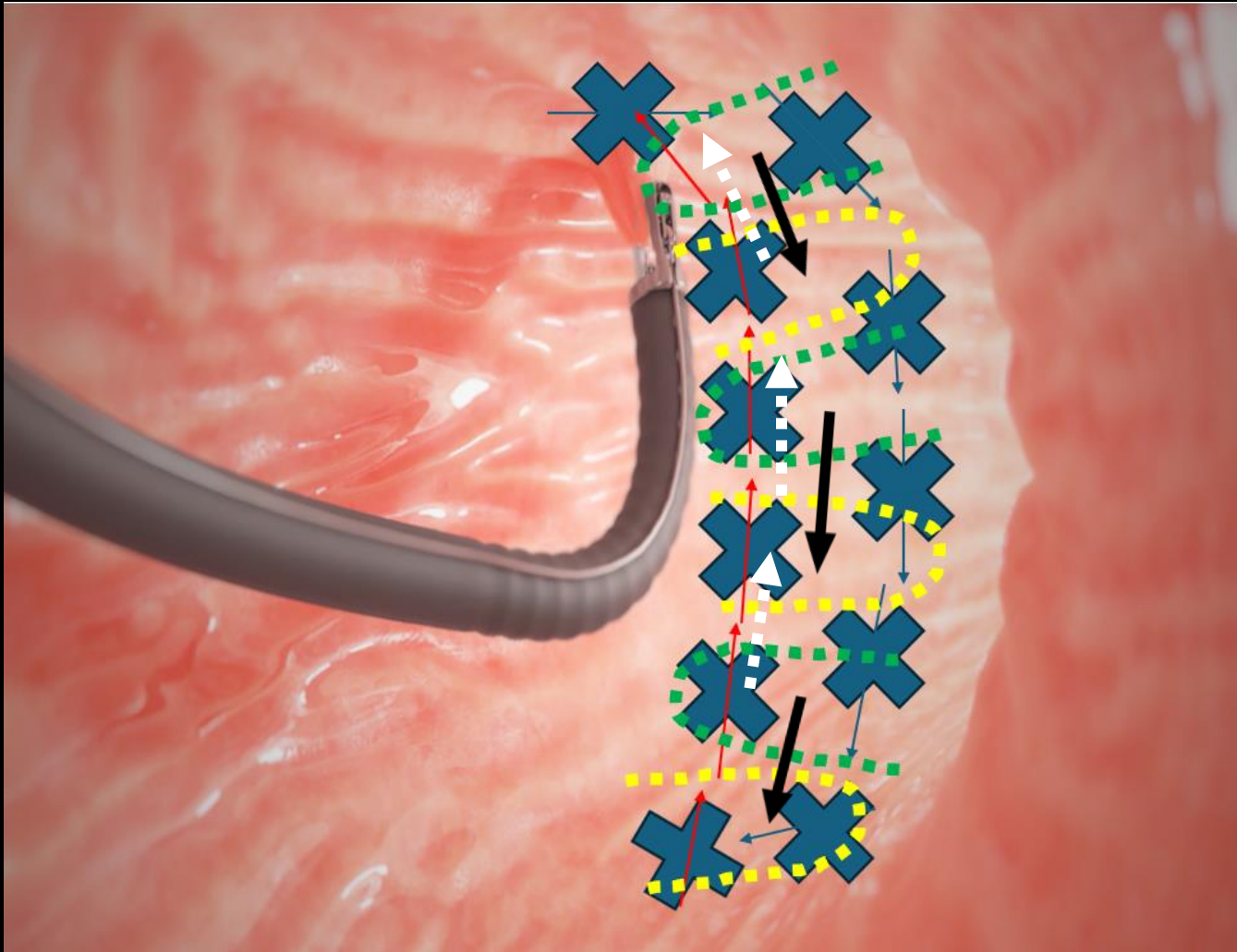


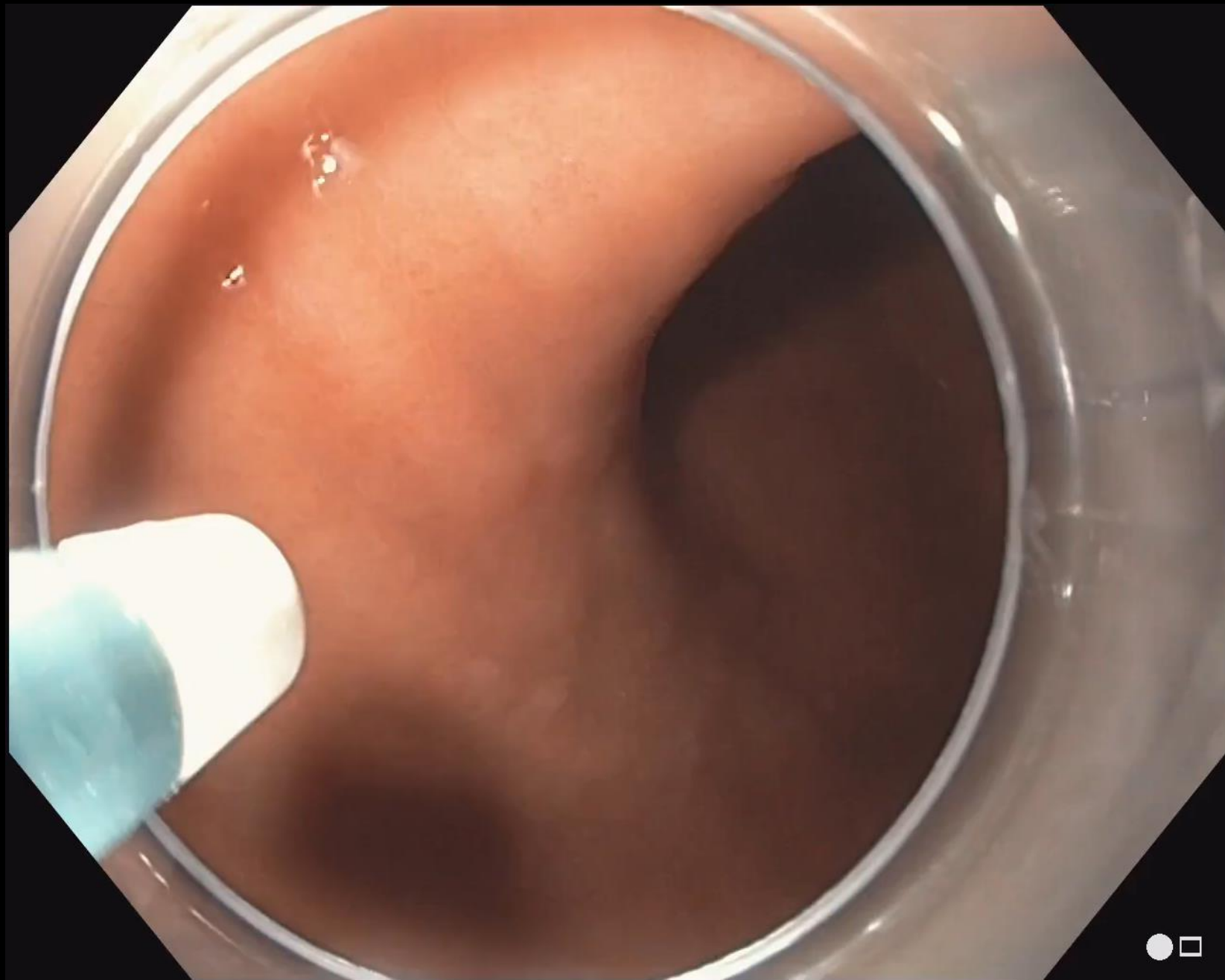
Third Interlocking Layer of the Middle Segment of Peaks

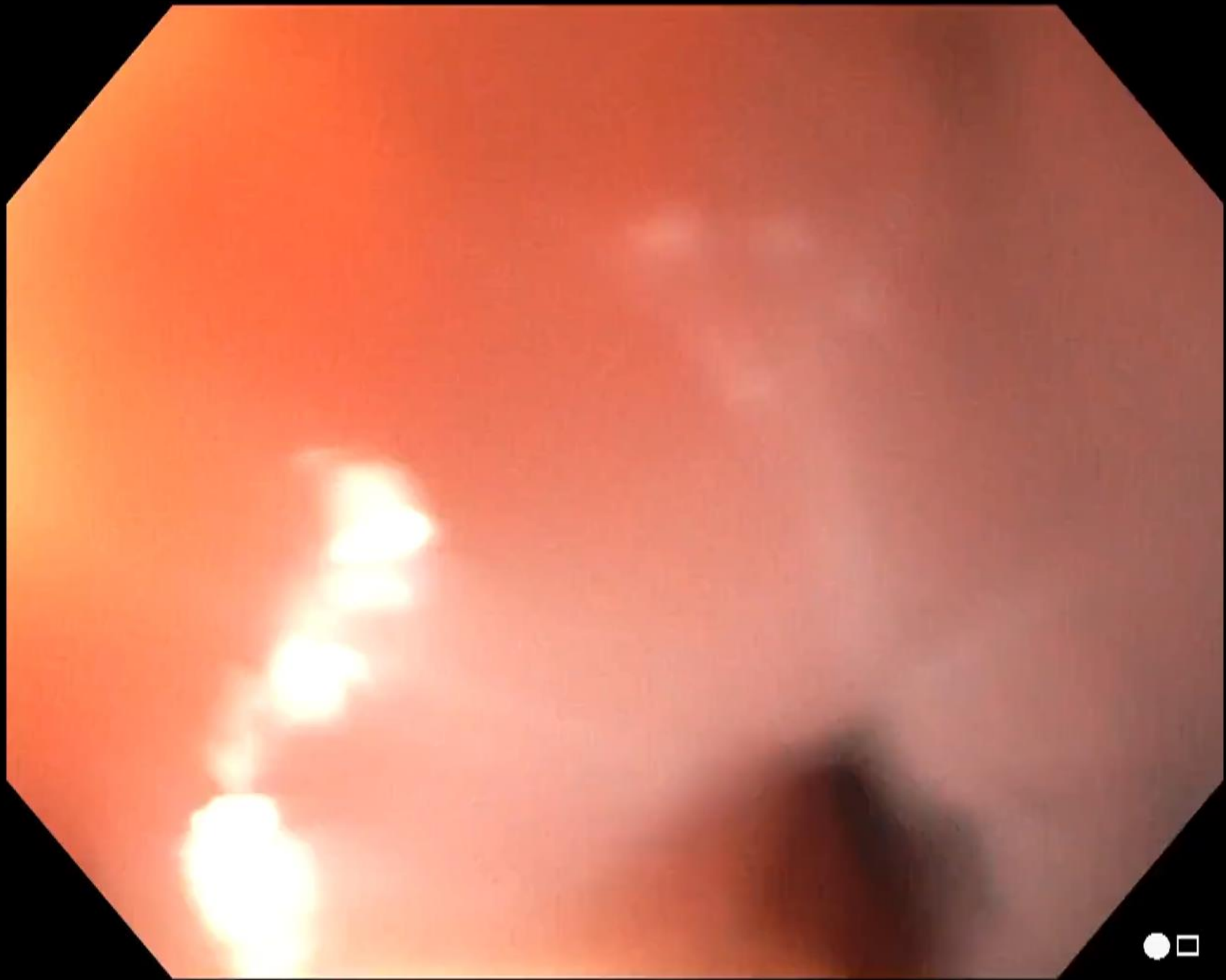


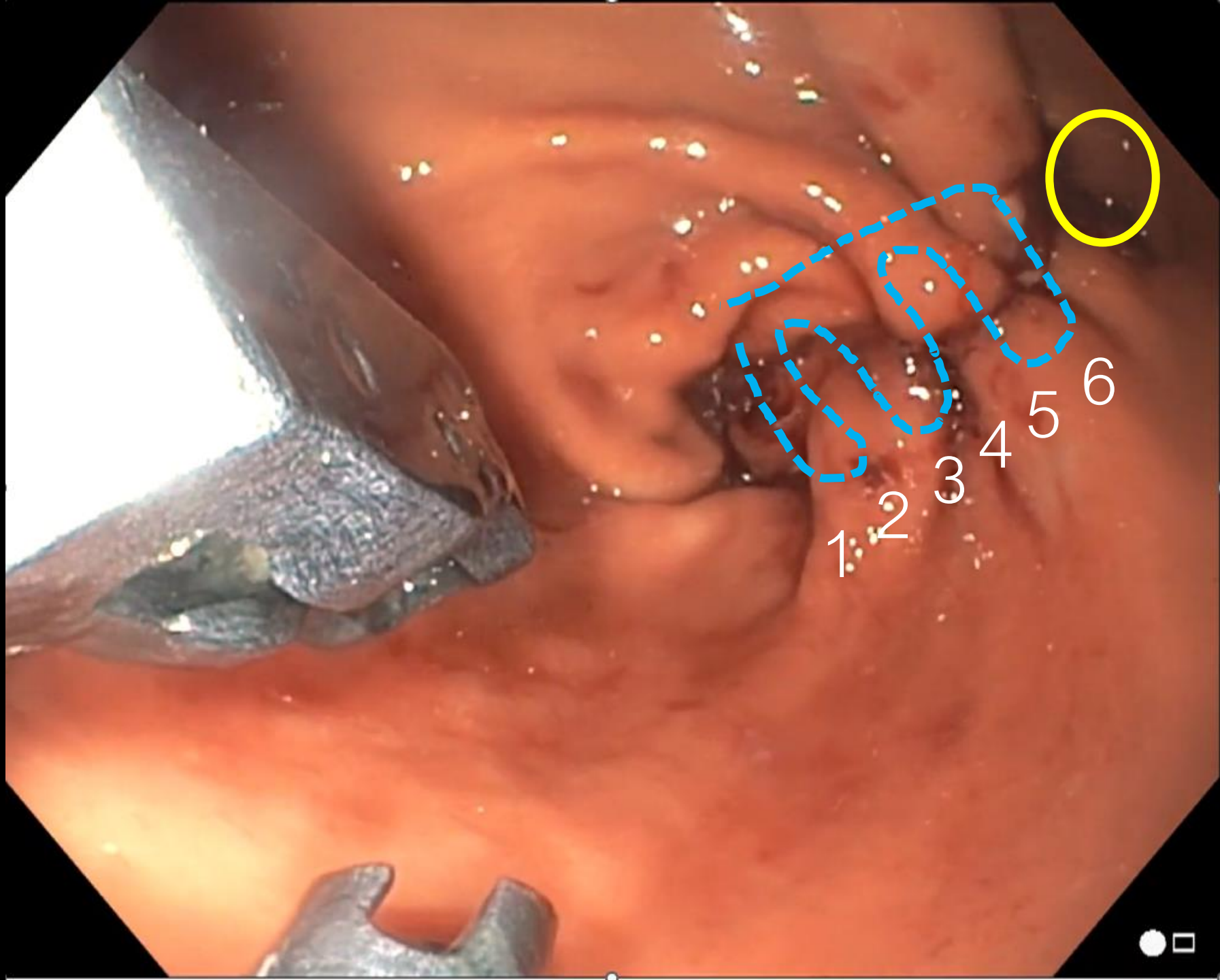


Fourth – Sixth Interlocking Layer of the Peak Segment of Peaks





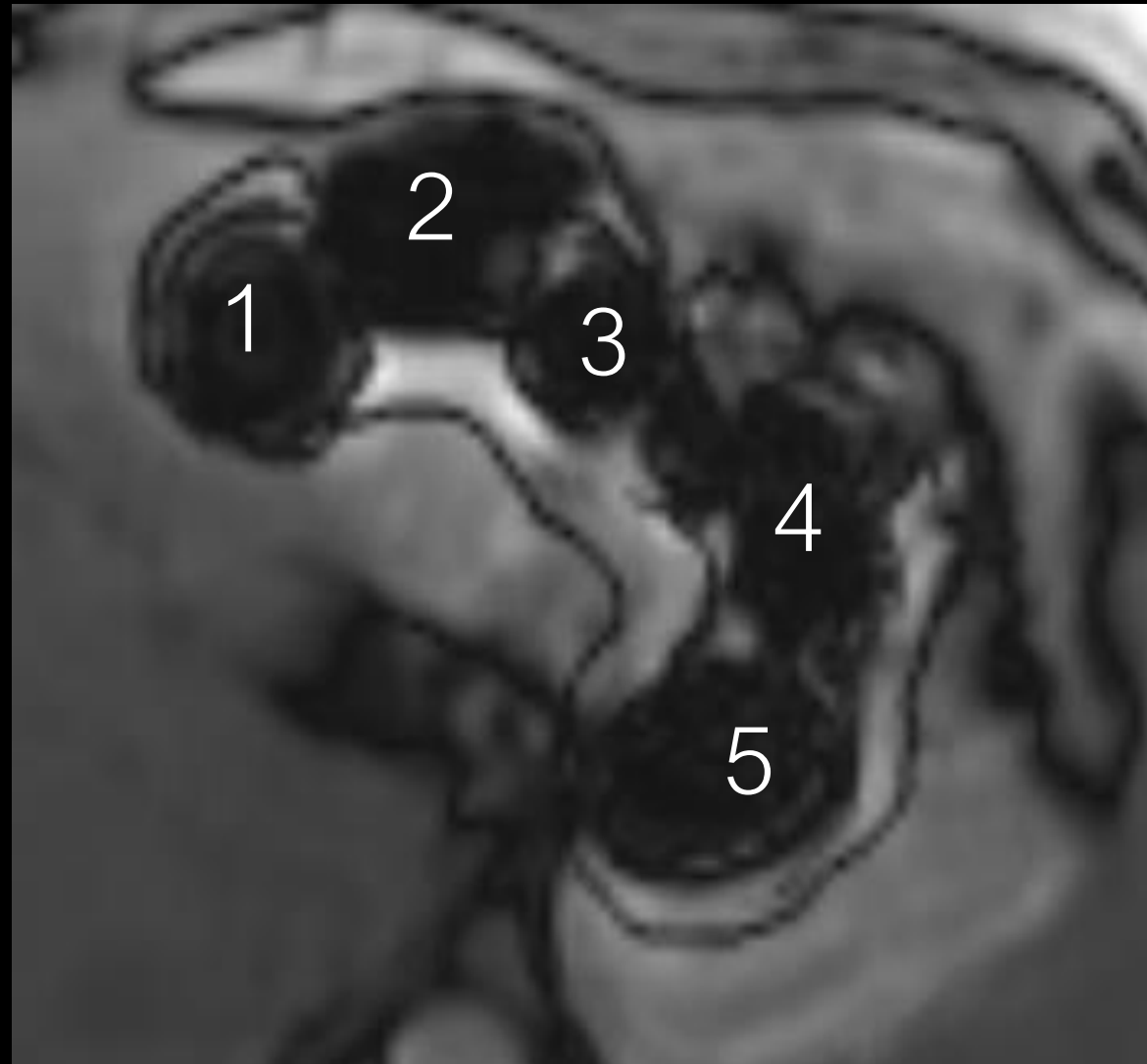
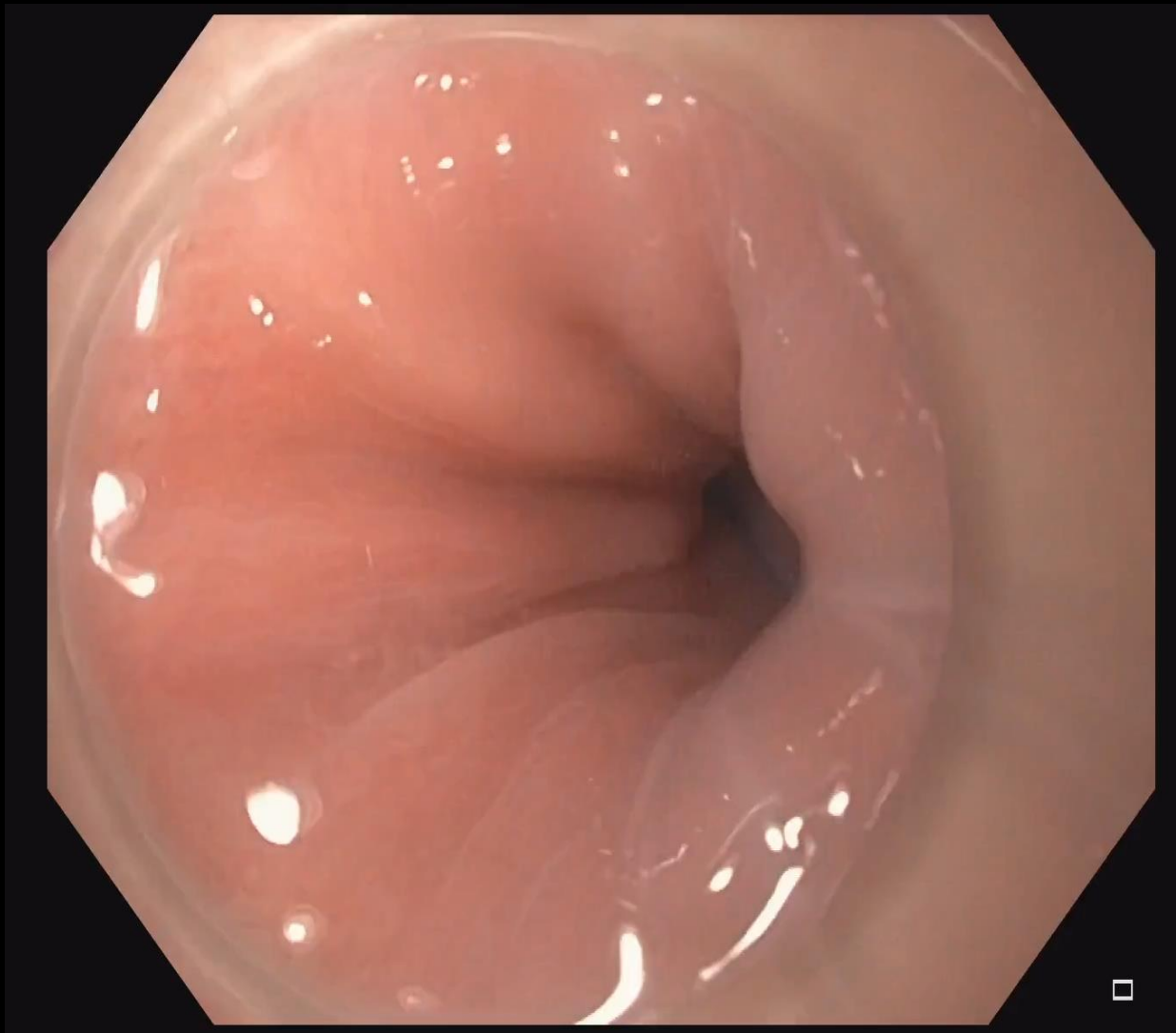




At completions of iESG with 5 interlocking 2-0 Prolene Sutures



Durability assessed with endoscopy and MRI at 6 months



%TBWL 23% at 6 months

PILOT RANDOMIZED CONTROLLED TRIAL (NCT05559866)

Baseline Screening & Enrollment

BMI ≥ 30 and ≤ 40 kg/m² with history of failure with non-surgical weight loss methods

Baseline assessment and tests
Informed consent



Single-Blind Randomization

1:1 randomization to either ESG or HAPC-ESG

ESG (n = 12)

HAPC-ESG (n = 12)

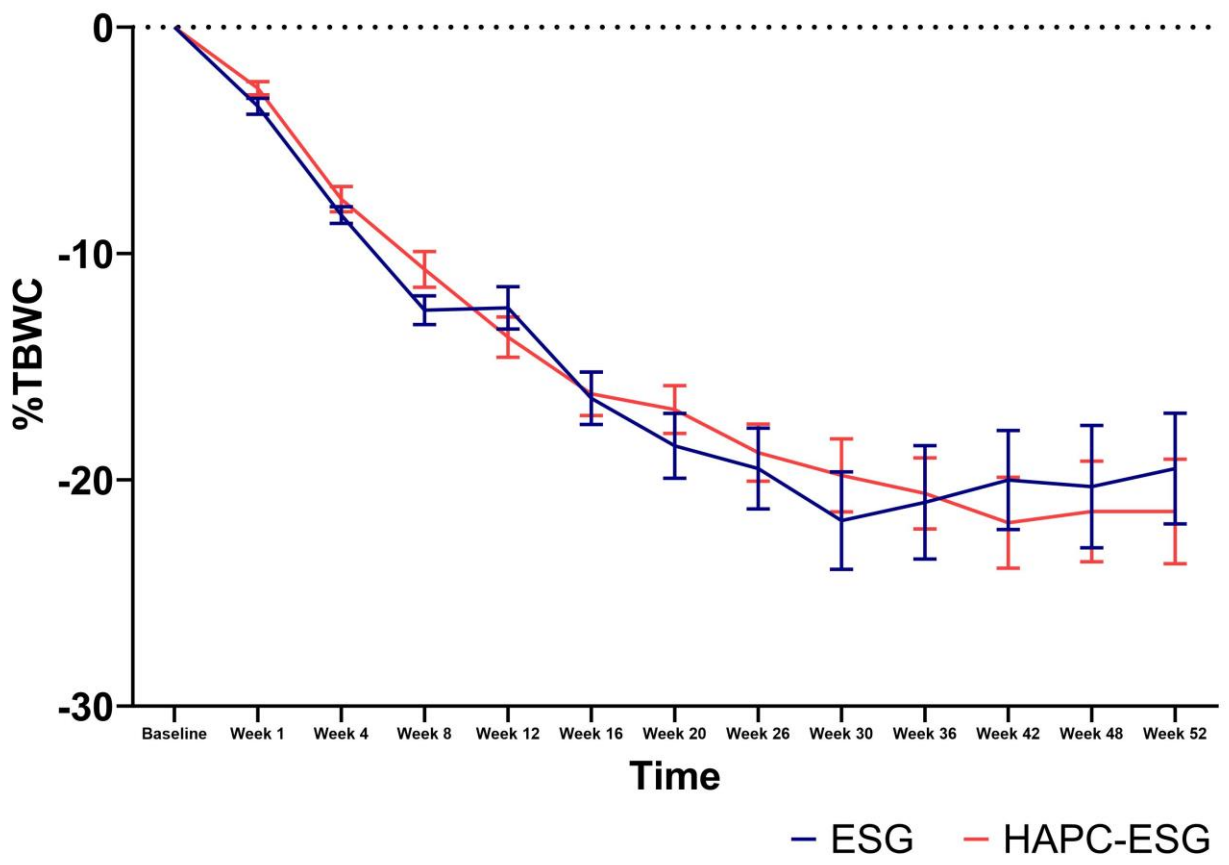
Follow-up: week 1, 4, every 4 weeks following till 52 weeks

Baseline assessment & tests

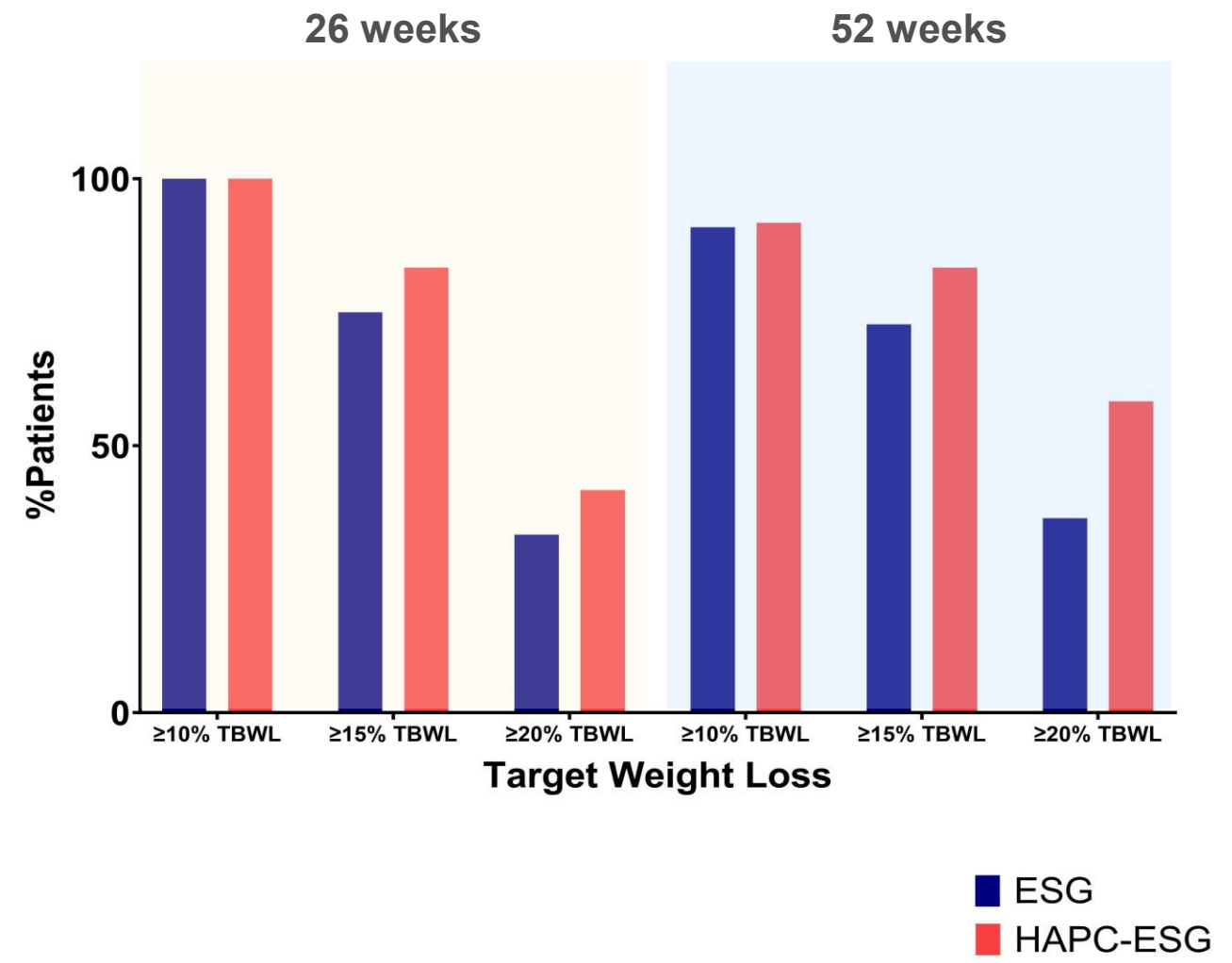
- Weight, height, BMI, waist and hip measurements
 - Nutritional assessment
 - Psychological assessment
 - Pregnancy test if indicated
 - EKG for all patients
 - Questionnaires
- Post-enrollment nutrition/exertion/satiety counseling and assessment
 - Laboratory tests
 - H-Pylori breath test
 - Gastric MRI
- Gastric emptying scintigraphy

RESULTS

A

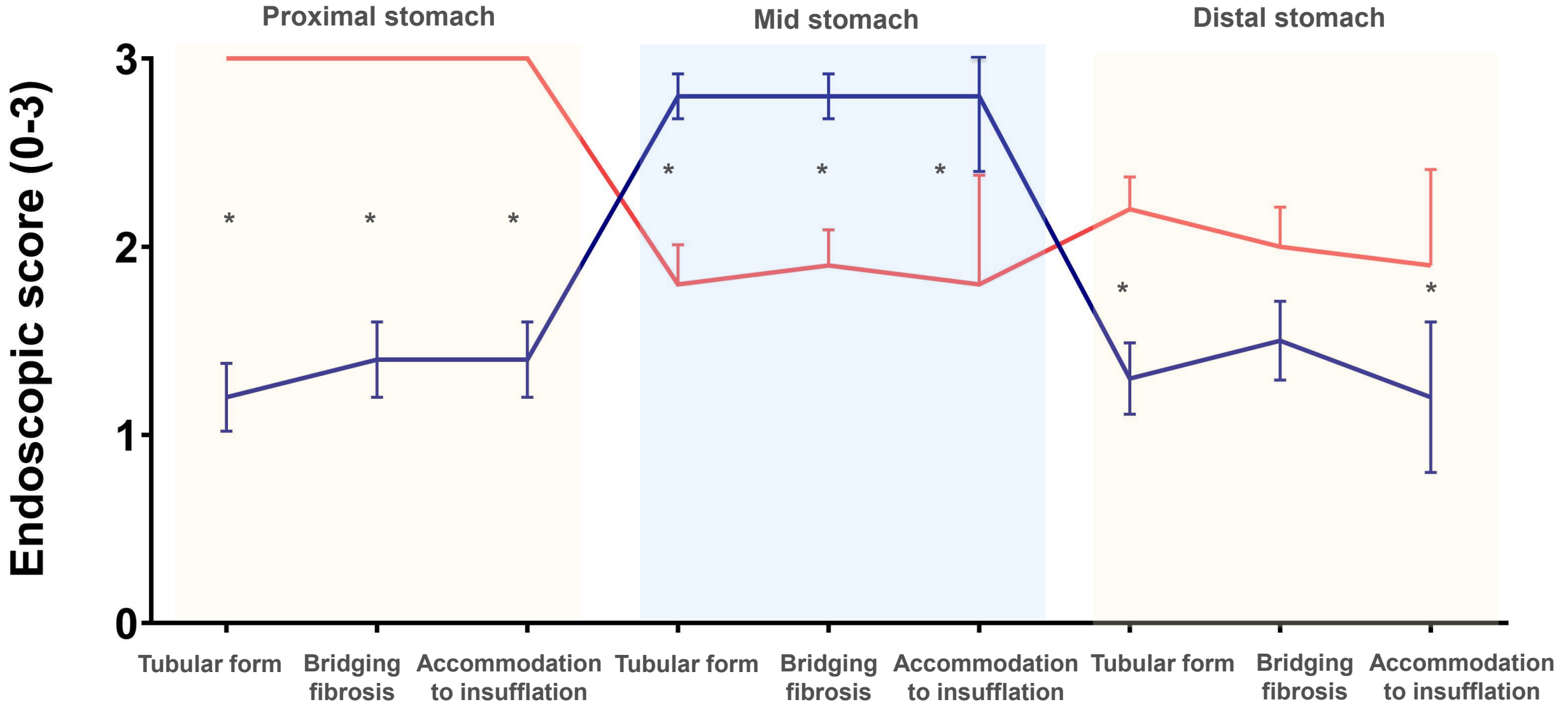


B



RESULTS

— ESG — HAPC-ESG



Questions

