MAYO CLINIC

IFSO 2024

NEW AND EMERGING ENDOSCOPIC PLATFORMS

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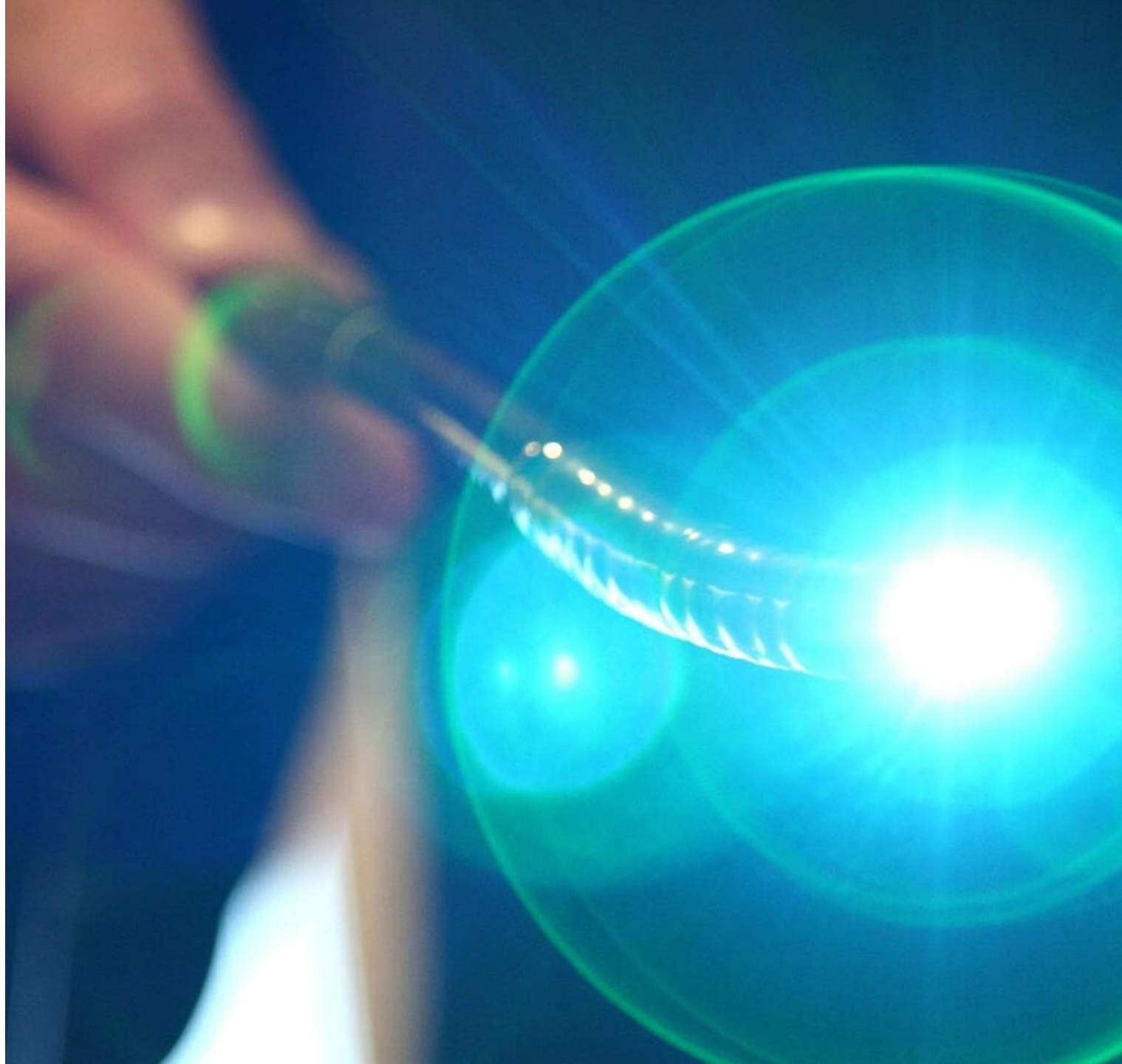
DISCLOSURES

- Consultant: Boston Scientific, Metamodix, BFKW, Apollo Endosurgery, Medtronic, Olympus.
- Co-inventor: Endogenex
- Research Support: Apollo Endosurgery, USGI, Endogastric Solutions, Boston Scientific, Medtronic, Spatz, Cairn.
- Speaker: Johnson & Johnson, Olympus, Endogastric Solutions

INNOVATION & NEW BOUNDARIES



Endoscopic Sleeve Gastroplasty

GIE 2013 Sep;78(3):530-5

Clin Gastroenterol Hepatol. 2017 Jan;15(1):37-43

Lancet 2022. Aug; 6 (10350):441-451

Scalable

Durable

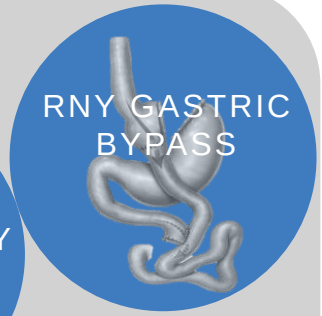
Value

EFFICACY & DURABILITY

Next Gen EBMTs

Medications

EBMTs

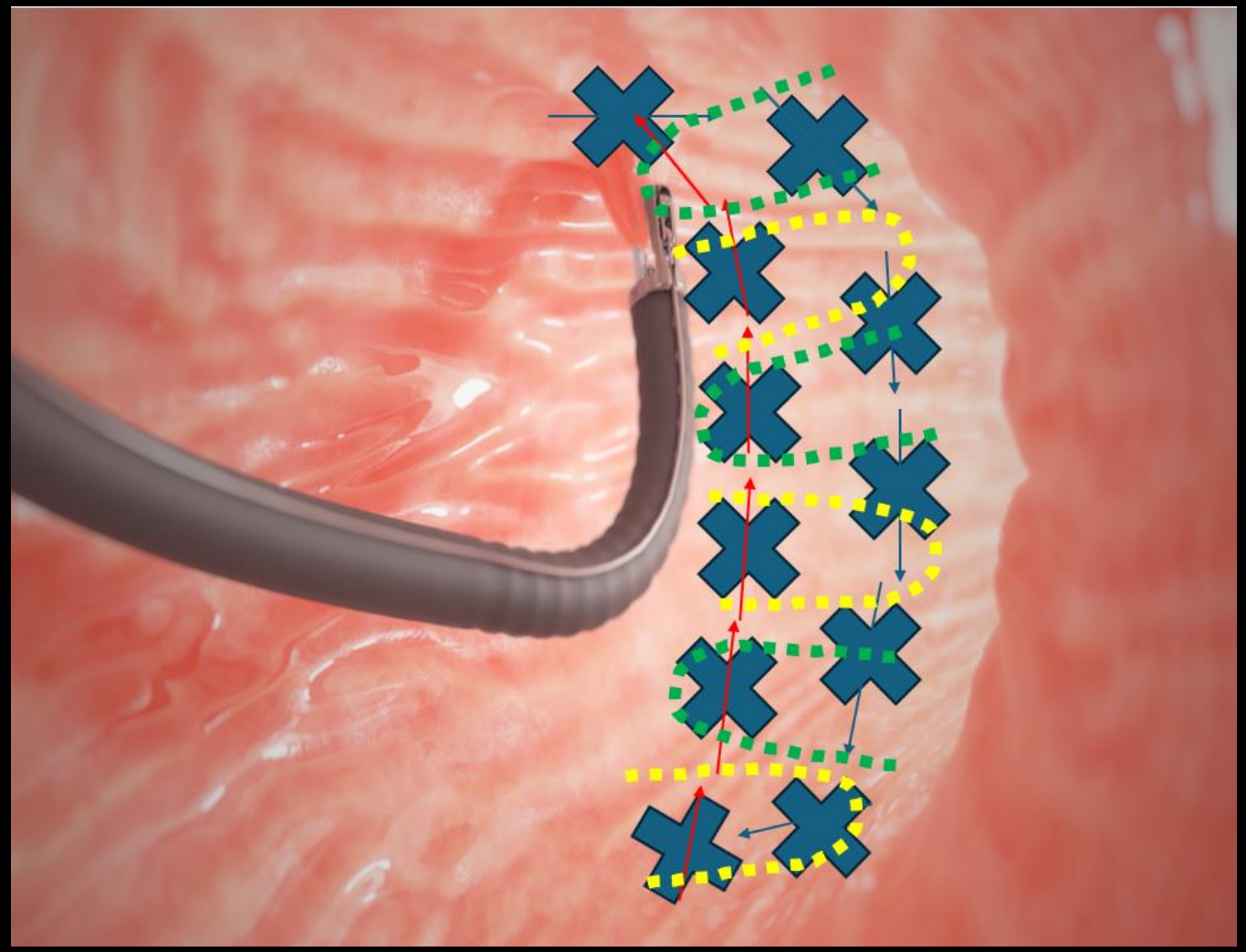


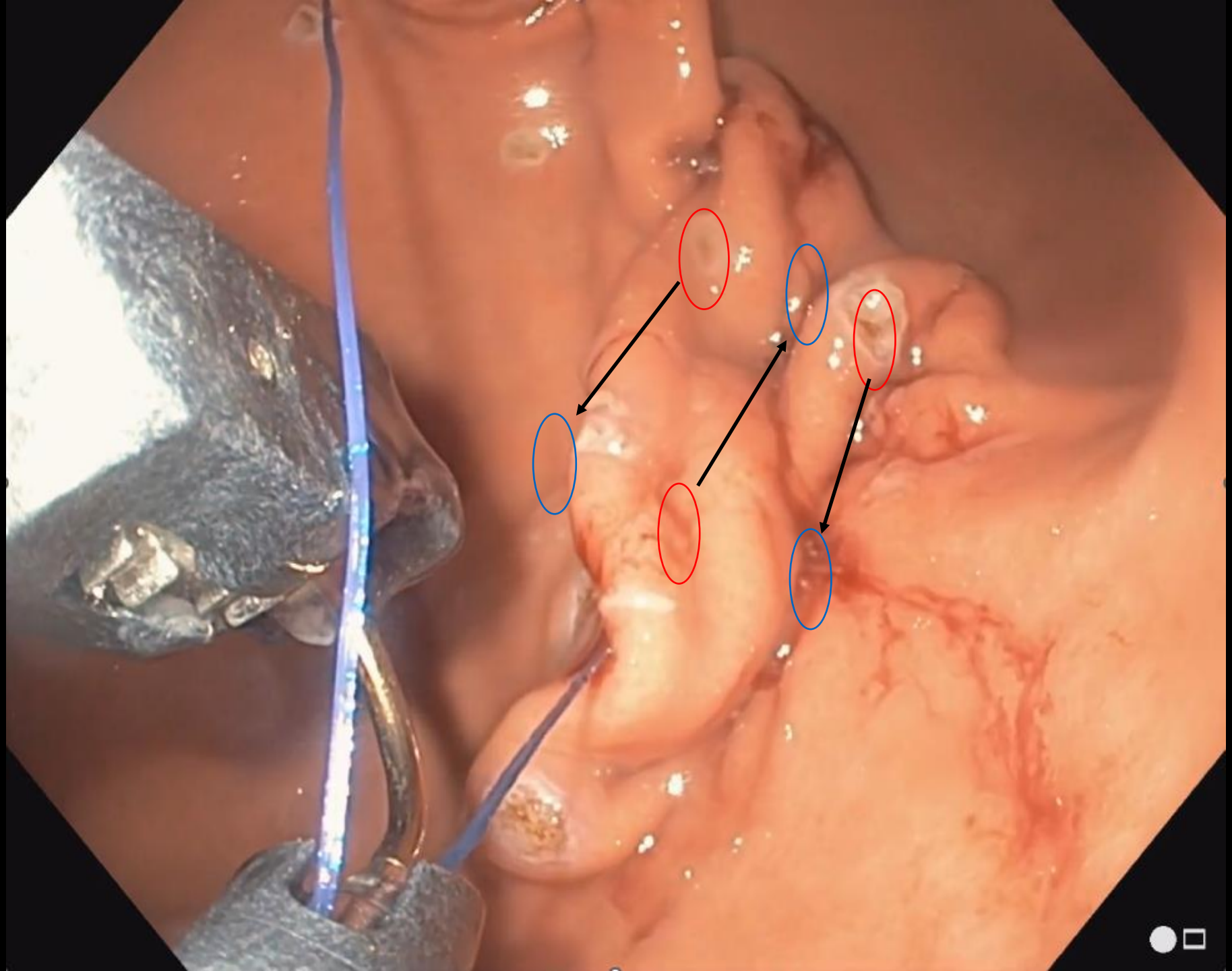
SURGICAL OPTIONS

INVASIVENESS

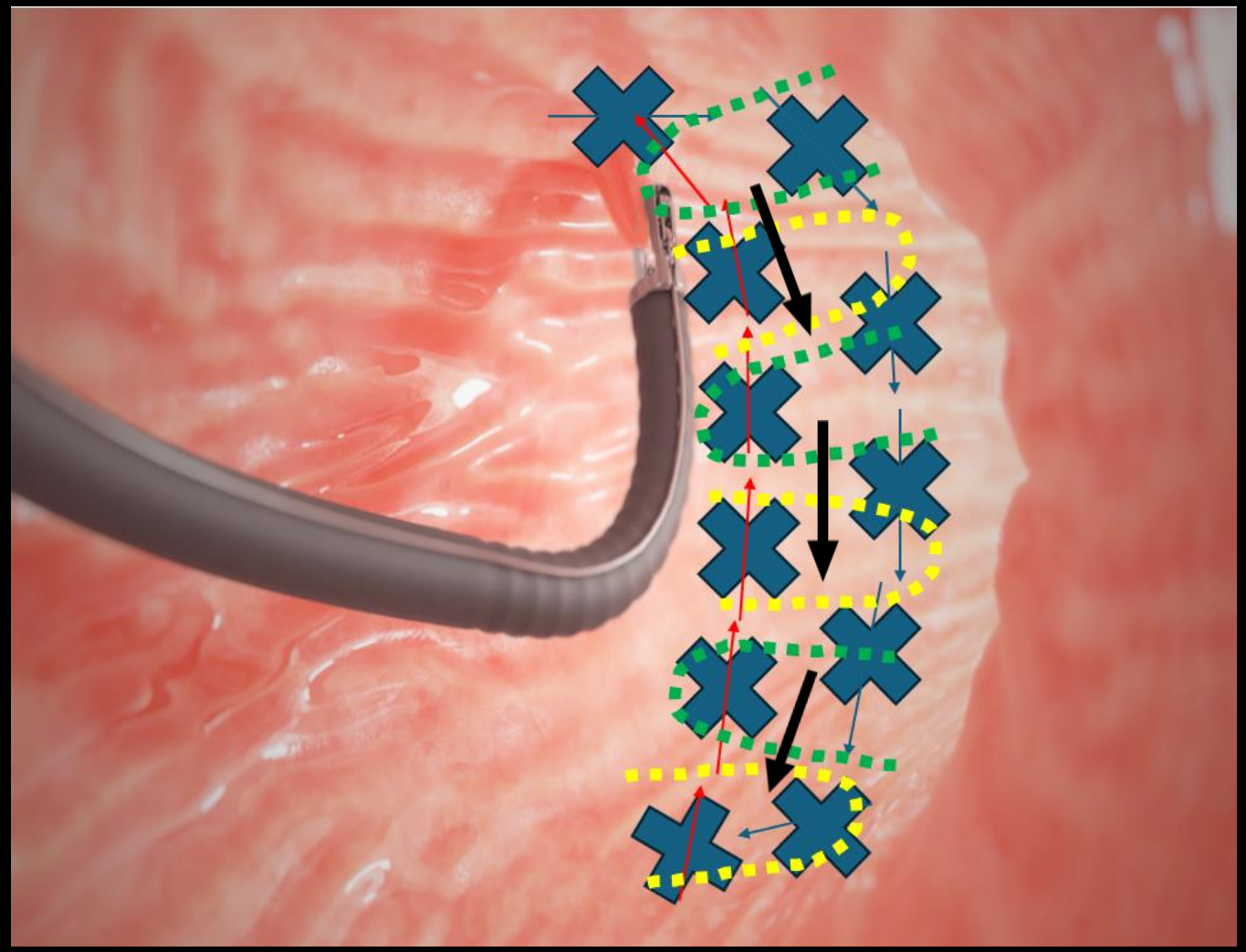
NEXT GENERATION ENDOSCOPIC SUTURING DEVICE (OVERSTITCH NXT)

First Two Interlocking Layers of Peaks and Valleys (Base)

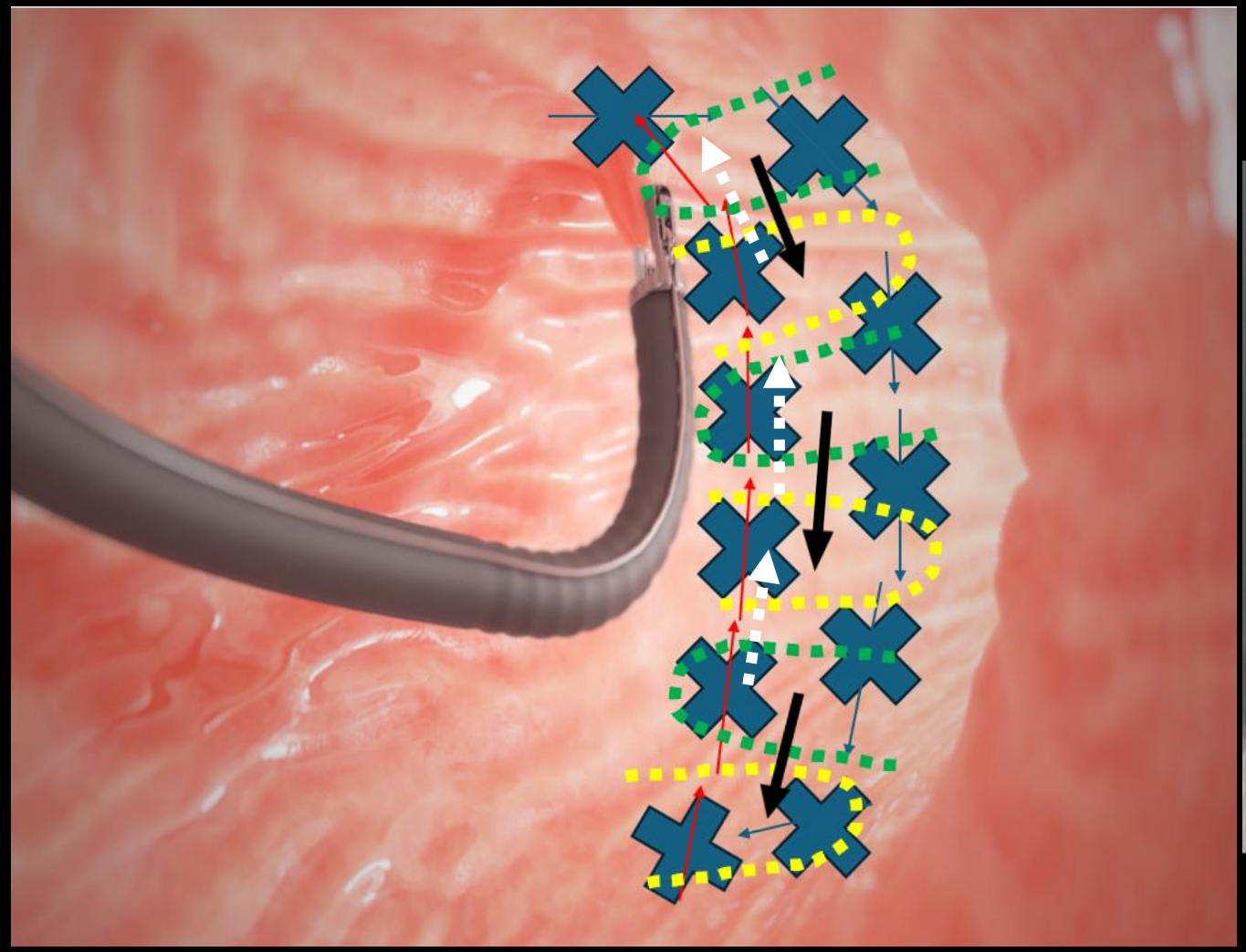


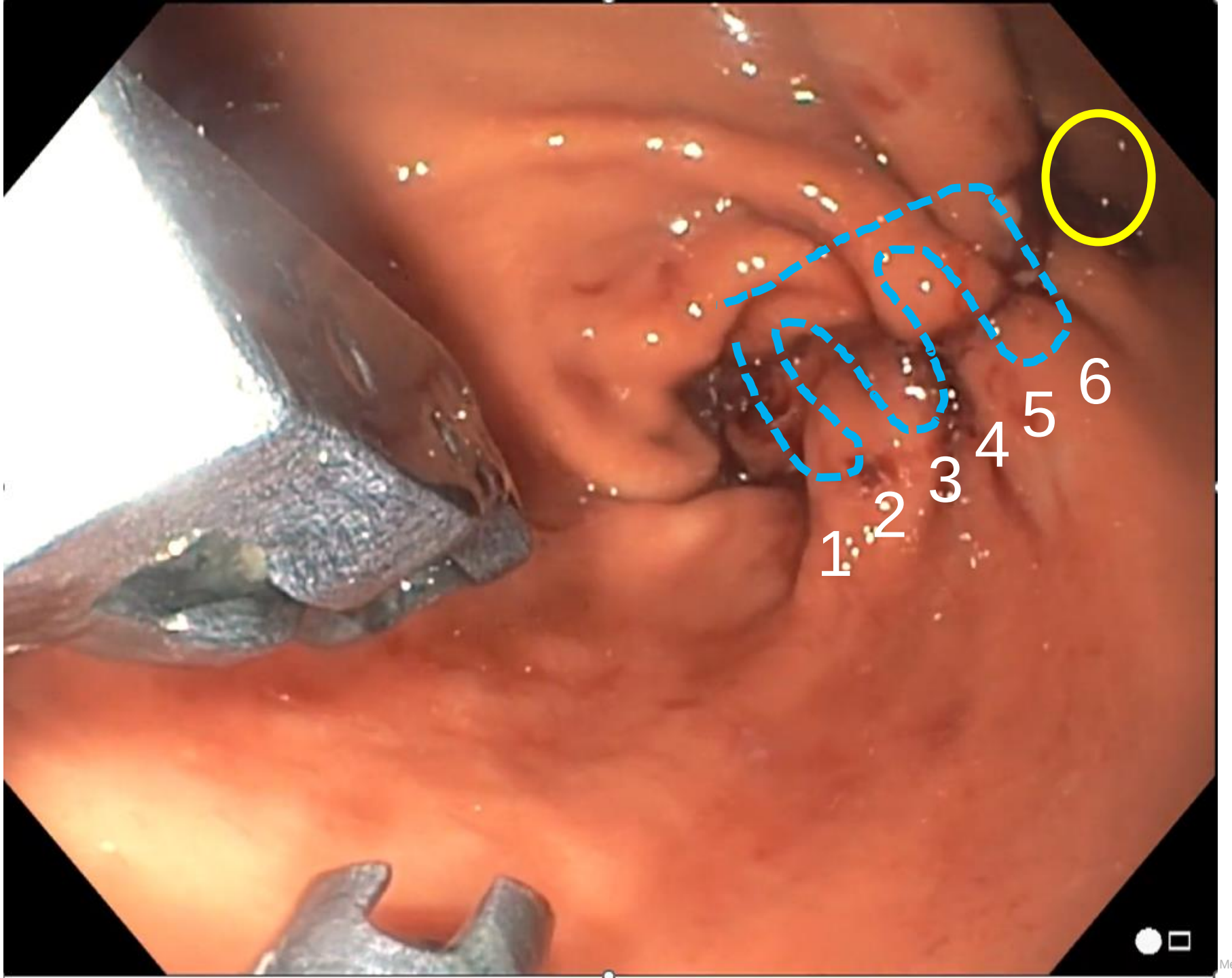


Third Interlocking Layer of the Middle Segment of Peaks

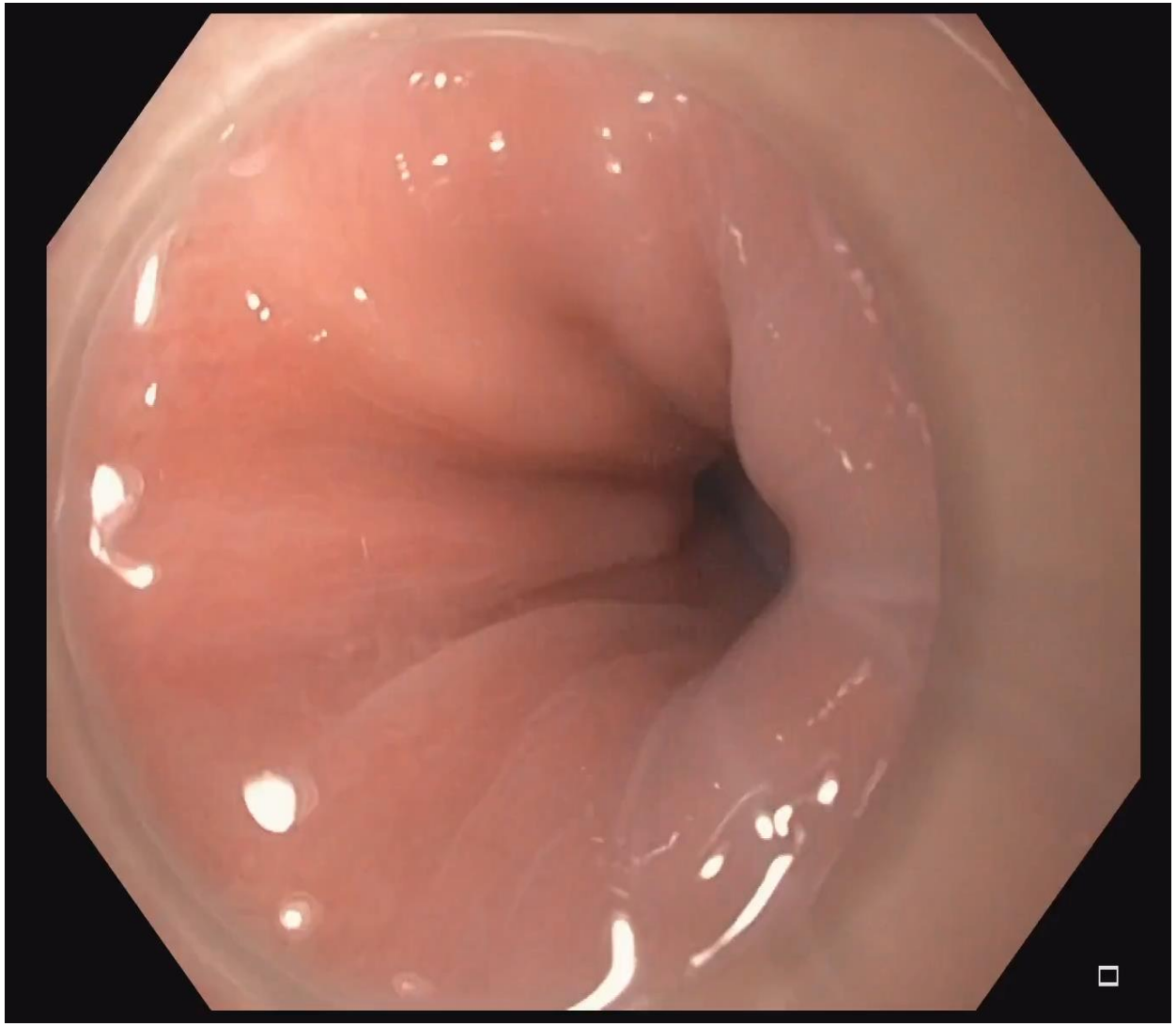


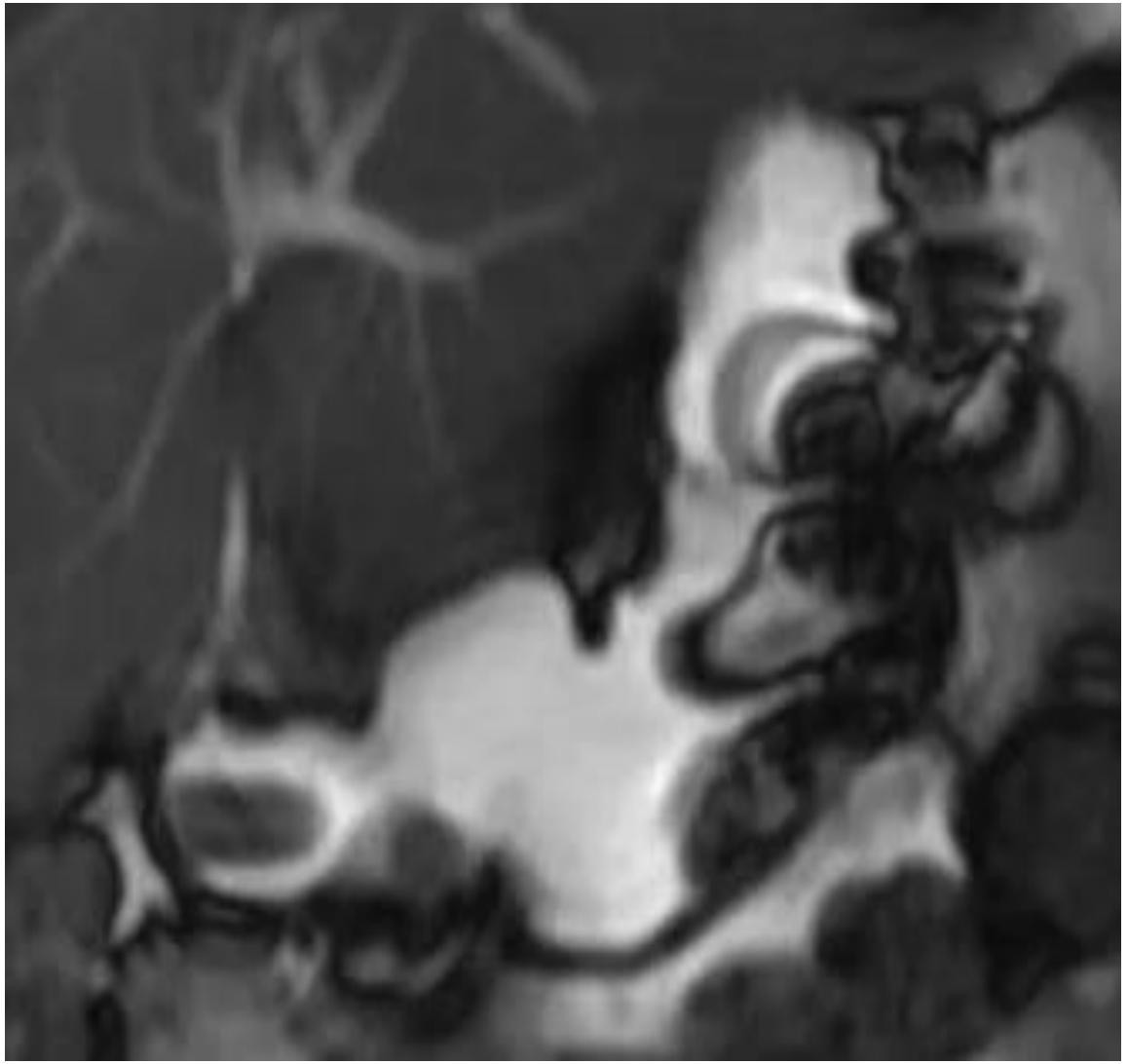
Fourth – Sixth Interlocking Layer of the Peak Segment of Peaks




1
2
3
4
5
6

Outcomes Improving





%TBWL **23%** at 6 months

Improved Outcomes and Durability (@DDW2024 1921)

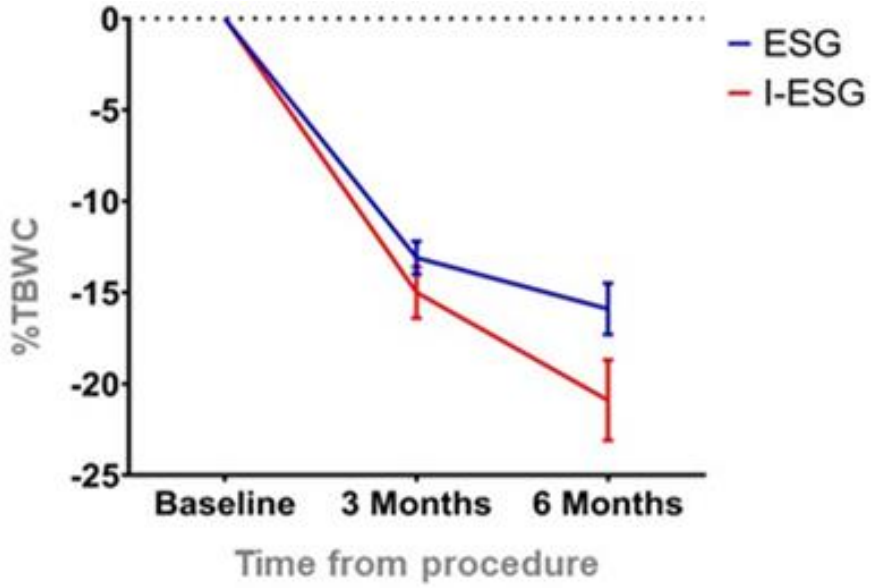


Figure 1B

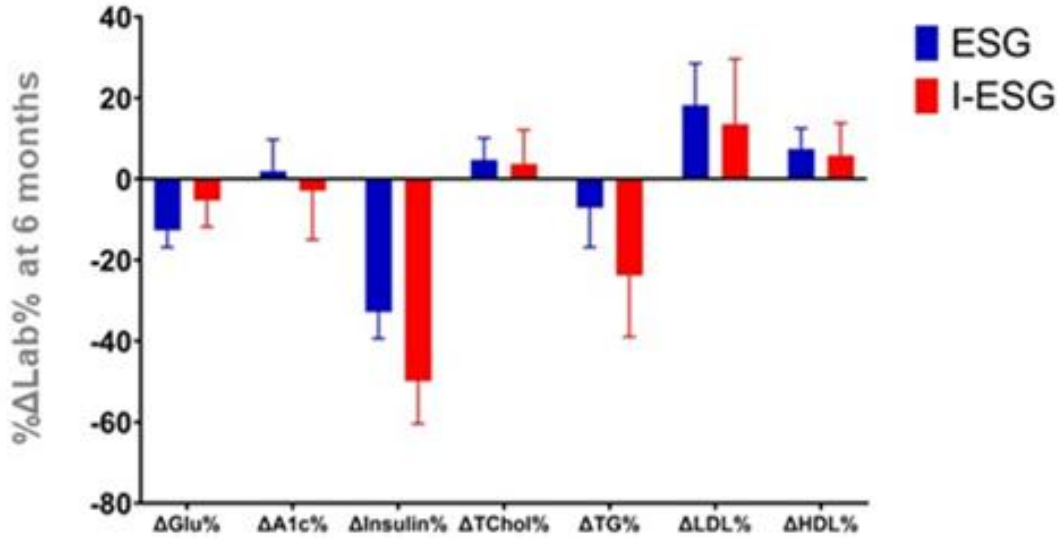
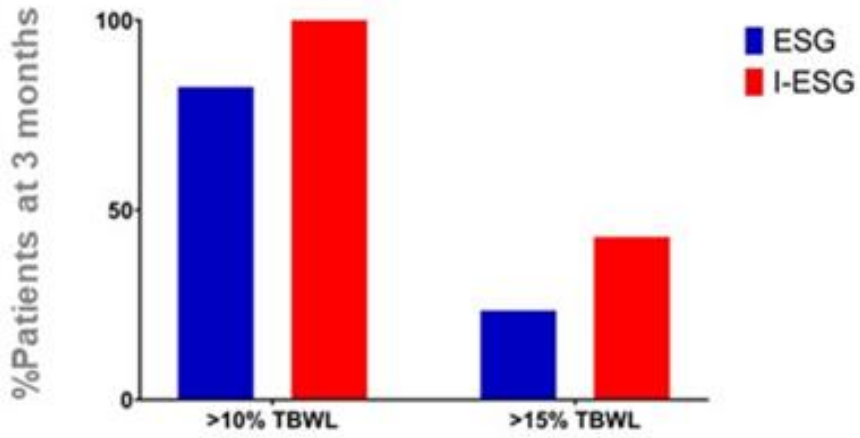
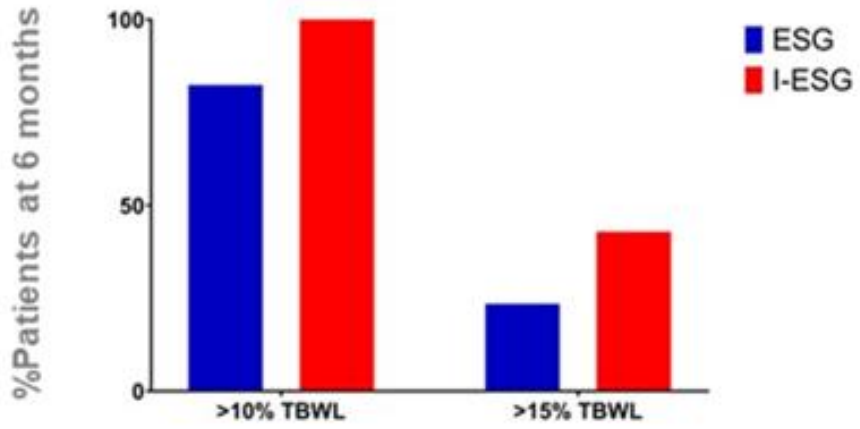


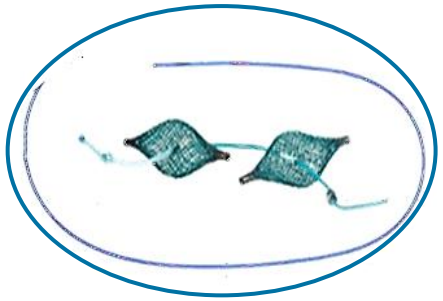
Figure 1D





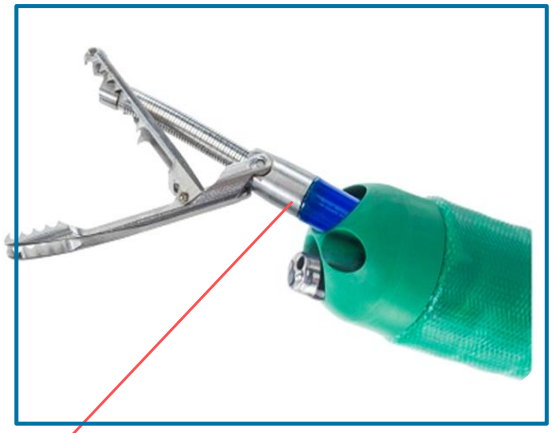
USGI INCISIONLESS OPERATING PLATFORM™ (IOP)

g-Prox® EZ

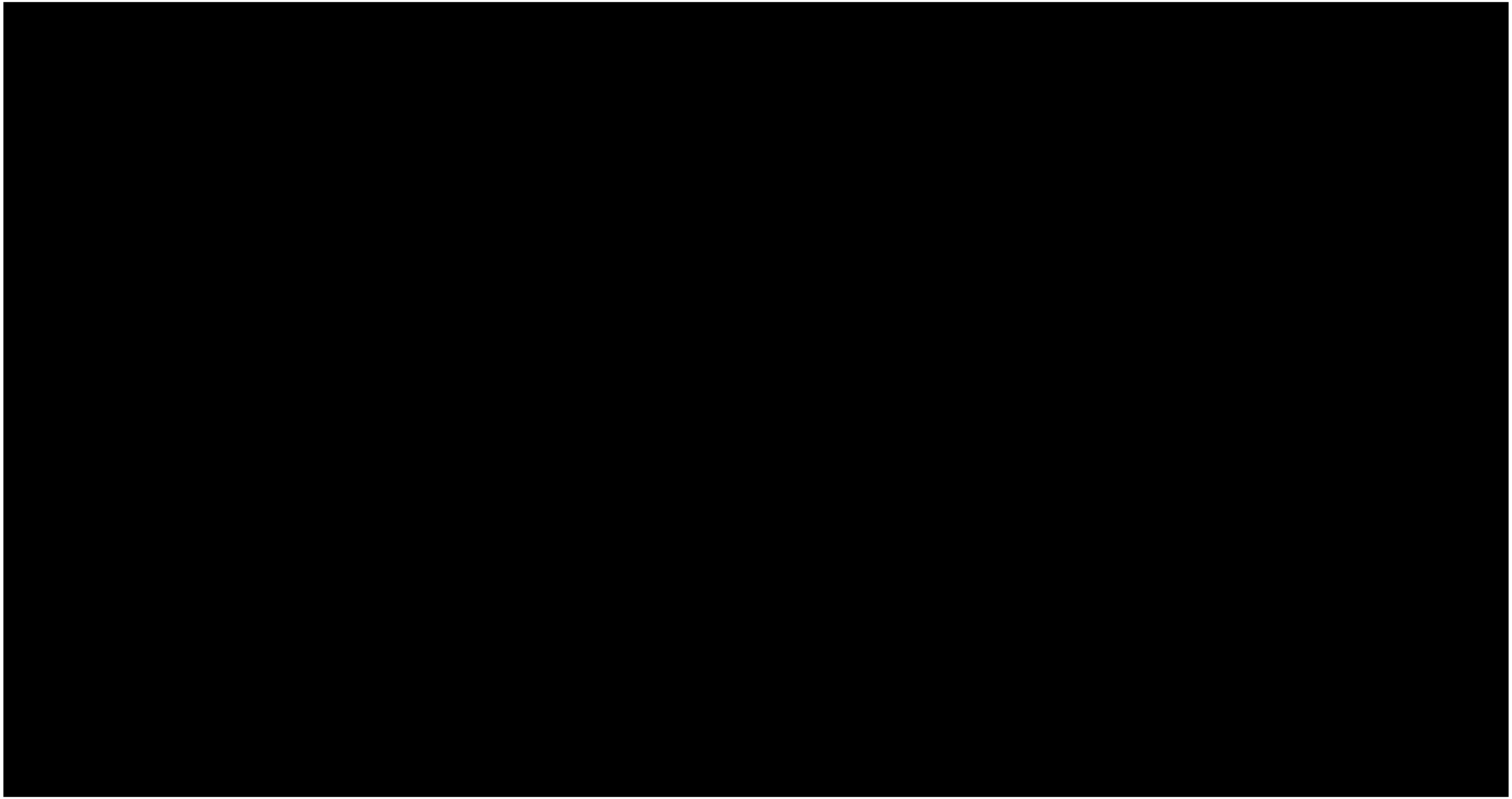


g-Cath™ EZ

g-Lix™

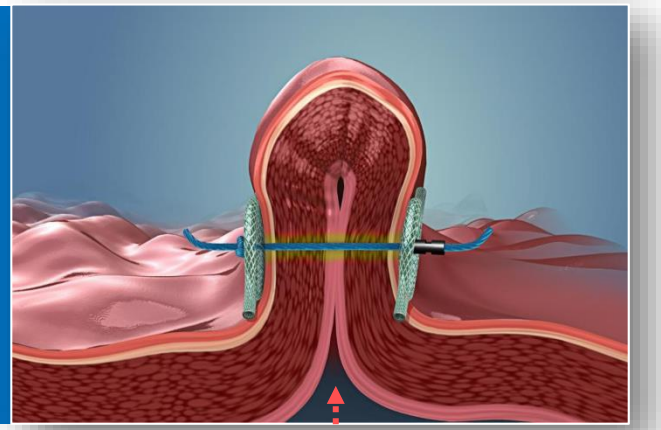


MECHANICS



DURABLE GASTRIC SEROSAL FUSION

SEROSAL HEALING

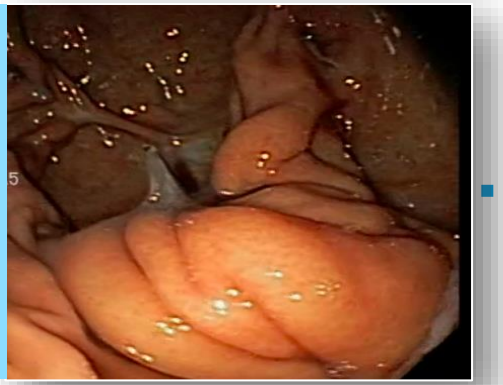


HISTOLOGY

Durable Serosa-to-Serosa Healing

7 Months

12 Months

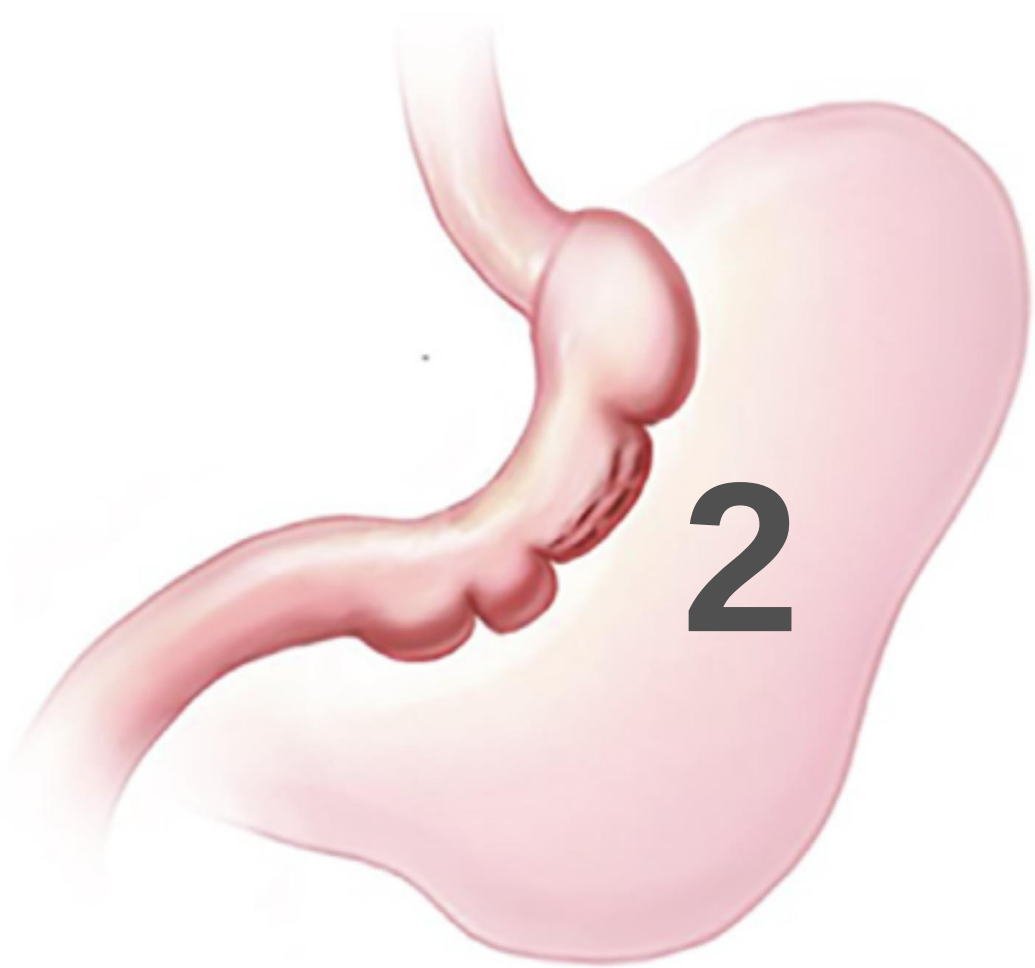


24 Months

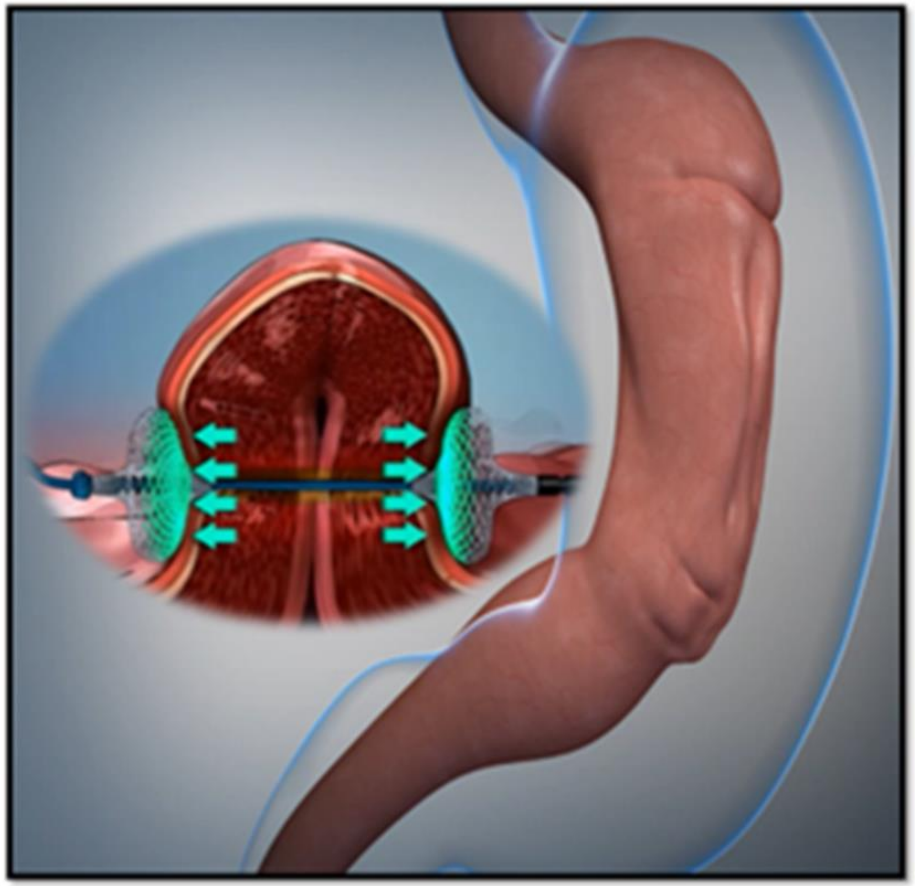
10 YEARS

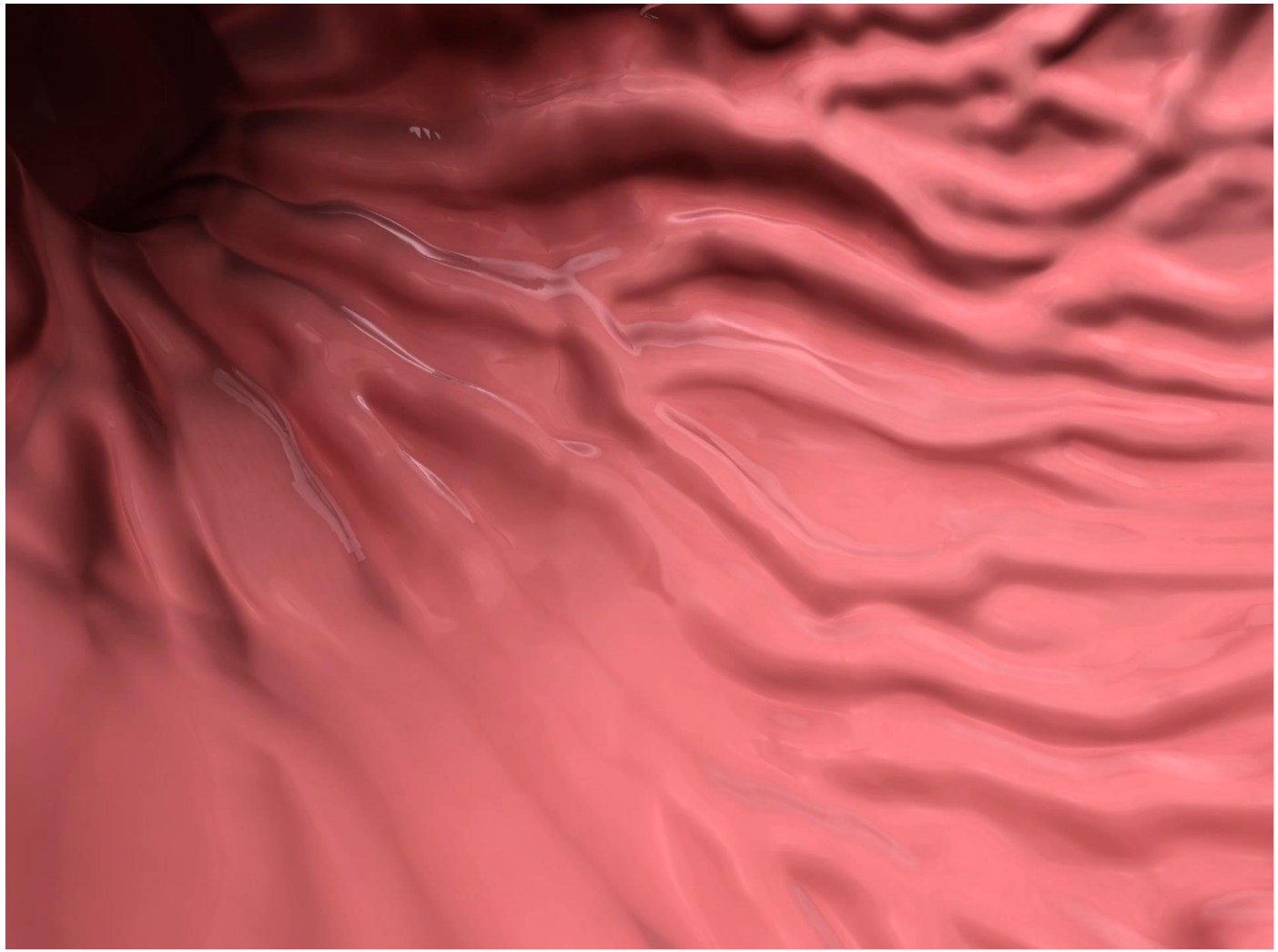
EGD images courtesy of Teknon. R Turro; Barcelona and Espinos; Spain

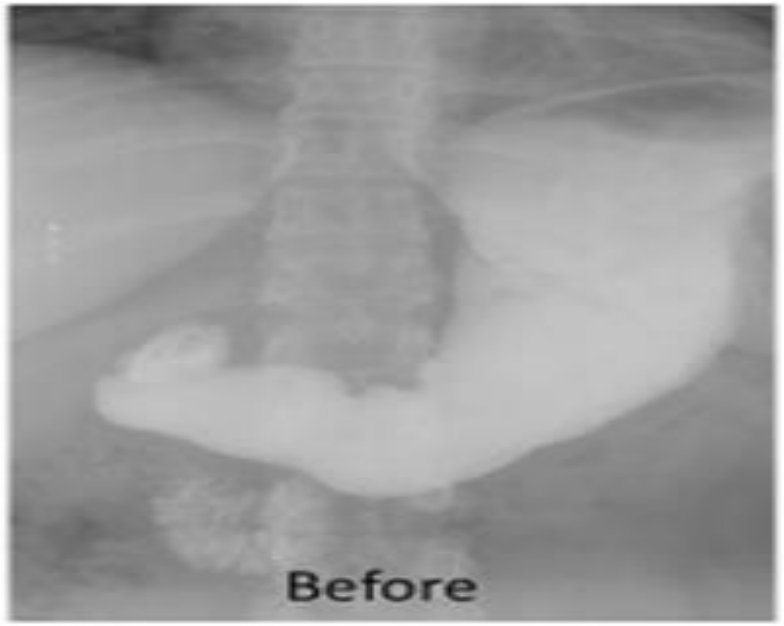
POSE1.0 VS POSE2.0

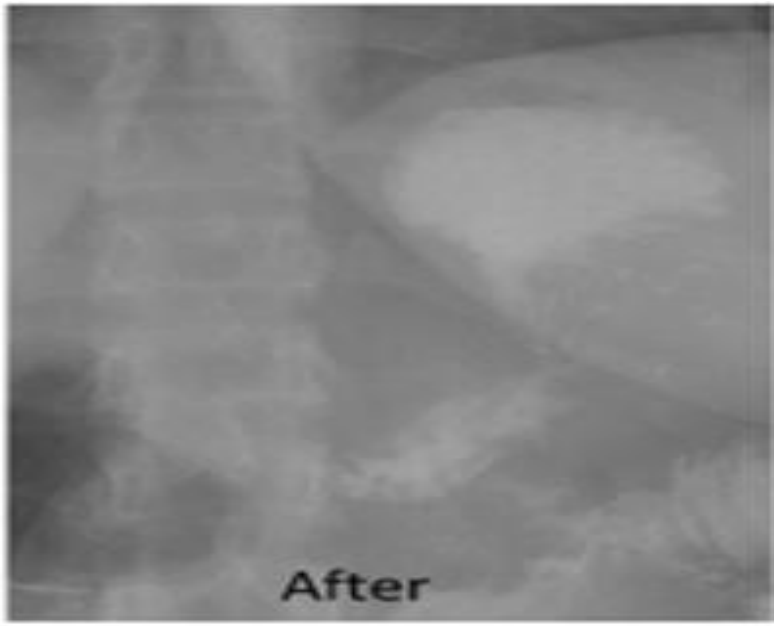


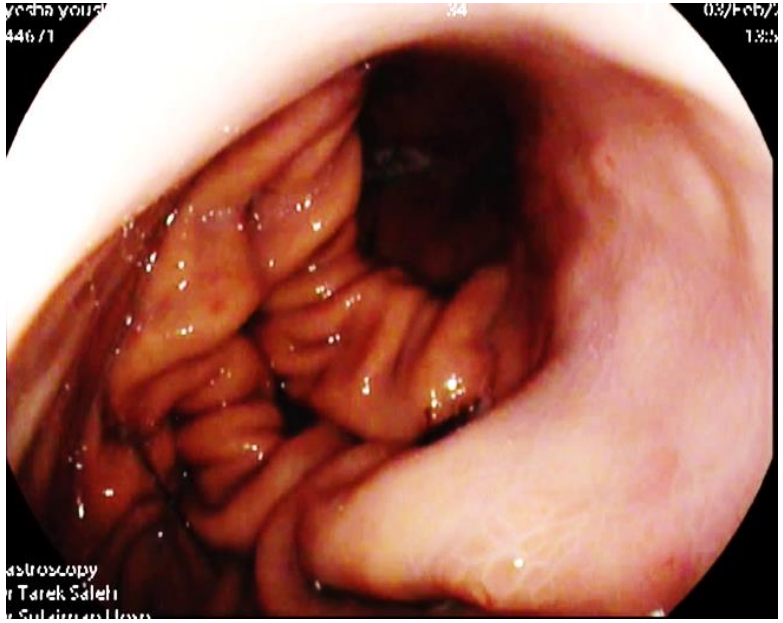
PRIMARY OBESITY SURGERY ENDOLUMINAL 2.0









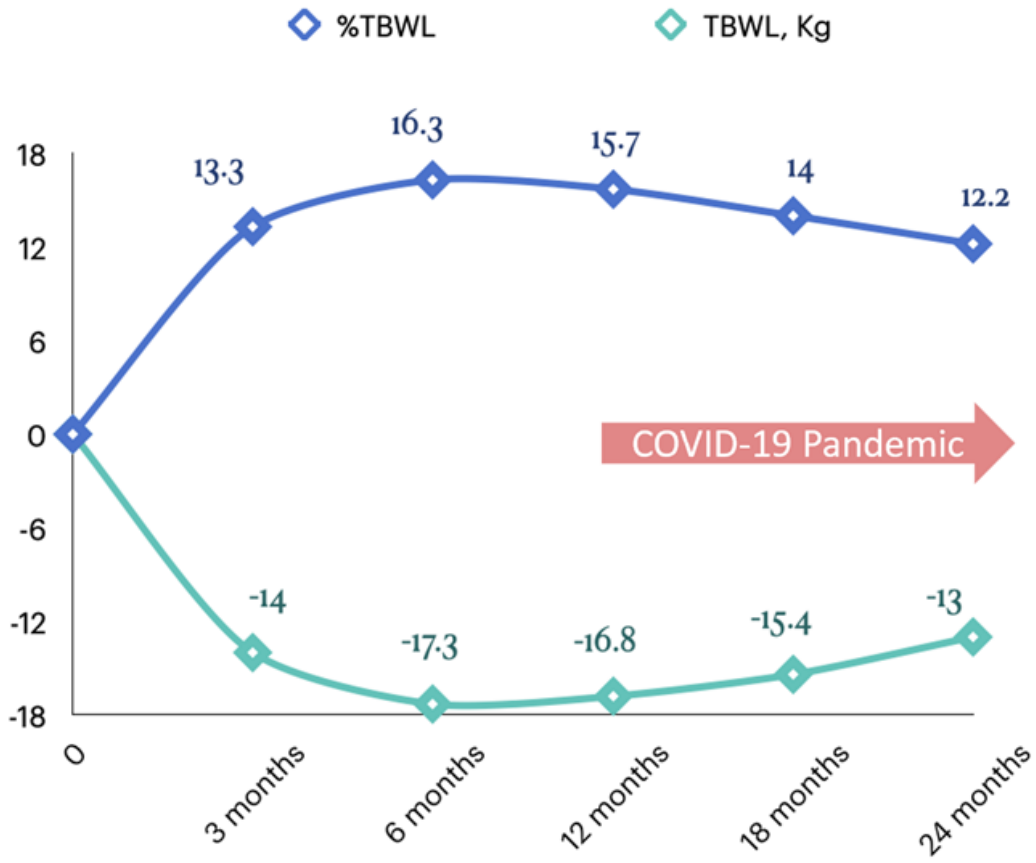


Multicenter Study > Clin Gastroenterol Hepatol. 2023 Jan;21(1):81-89.e4.
doi: 10.1016/j.cgh.2022.04.019. Epub 2022 May 6.

Prospective Multicenter Study of the Primary Obesity Surgery Endoluminal (POSE 2.0) Procedure for Treatment of Obesity

Gontrand Lopez Nava [1], Roman Turro Arau [2], Ravishankar Asokkumar [3], Daniel B Maselli [4], Babusai Rapaka [4], Reem Matar [4], Inmaculada Bautista [1], Jorge Carlos Espinos Perez [5], Alfredo Mata Bilbao [5], Veeravich Jaruvongvanich [4], Eric J Vargas [4], Andrew C Storm [4], Manoel Galvao Neto [6], Barham K Abu Dayyeh [7]

N = 44
61% female
Mean age: 45 ± 9.7 years
Mean body mass index: 37 ± 2.1 kg/m2
Follow-up = 24 months
Repeat EGD and Radiographic Evaluation
%TBWL at 12 months 15.7%
No SAE



PILOT FDA RCT

US Pilot Study	Location	Type	Subjects	Design	Endpoints
4 Centers	USA	Prospective Multi-Center 2 Surgeons 2 GI	**Treated 25** **Control 10**	BMI ≥35 - <40 with one comorbid 12 Month Study	**Primary** %TBWL @12 mo ≥5% TBWL @12mo SAEs associated with device & procedure **Secondary** Change in GEBT and Plication Durability

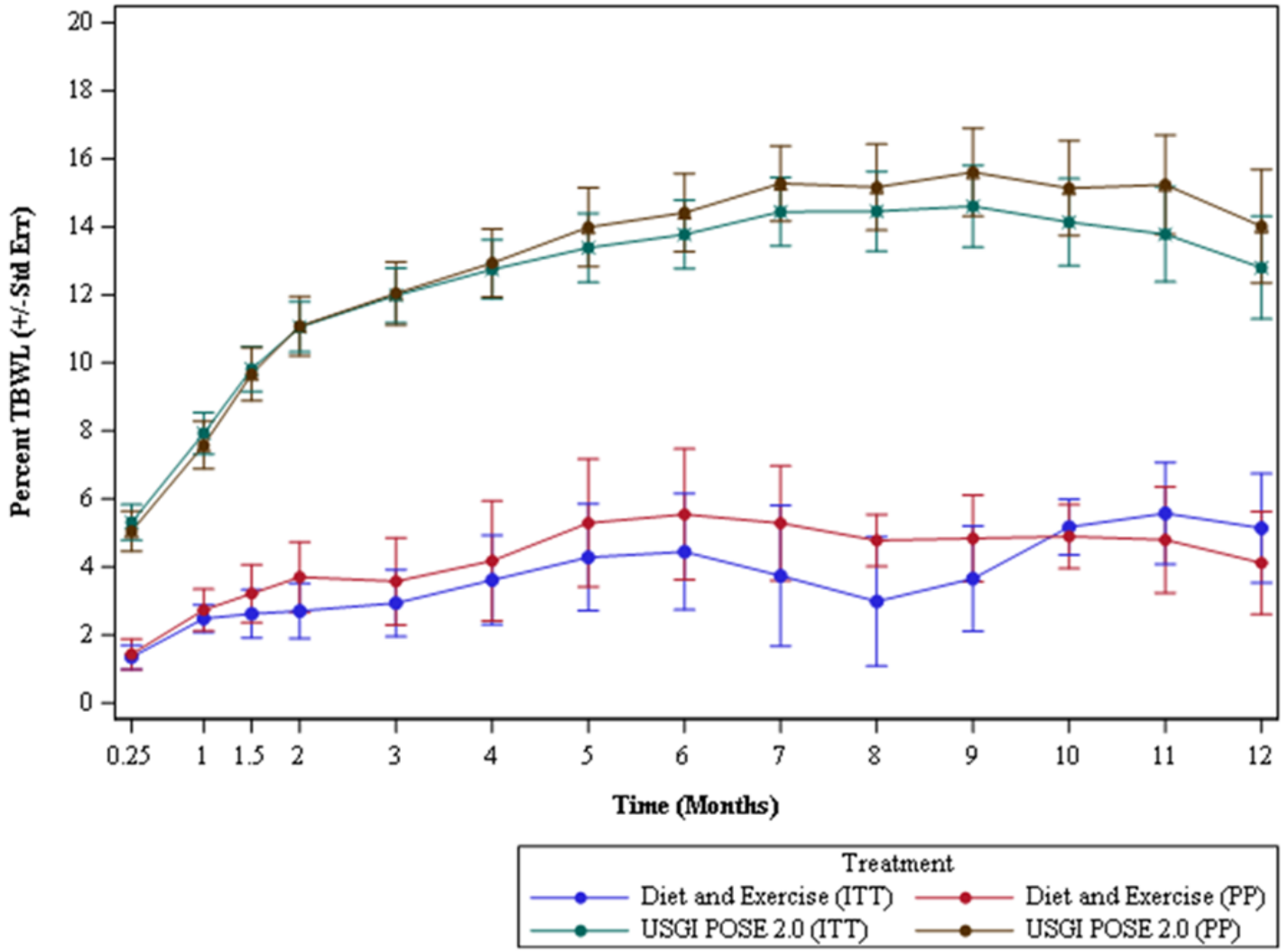
ClinicalTrials.gov Identifier: NCT03837691

RESULTS: EFFICACY

%TBWL: 14±7.6%

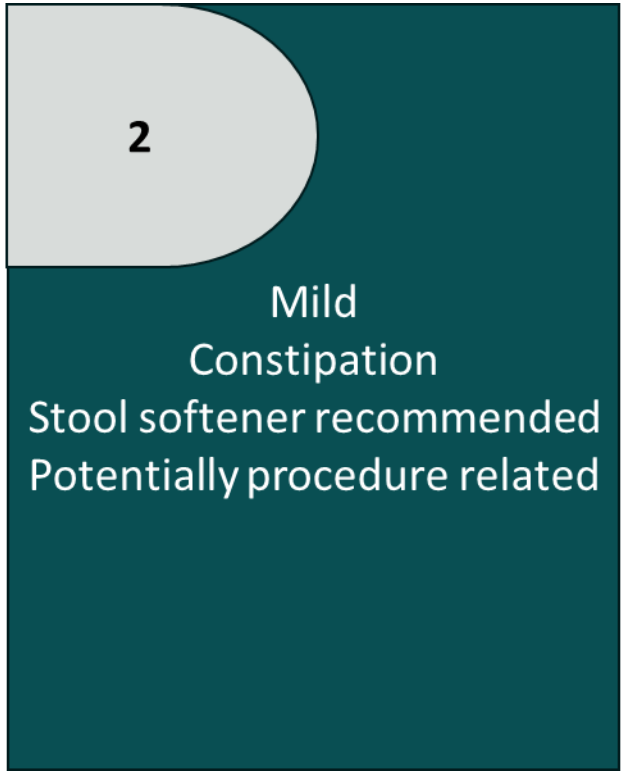
Procedural Time: 48 ± 12 min

Average 20 plications



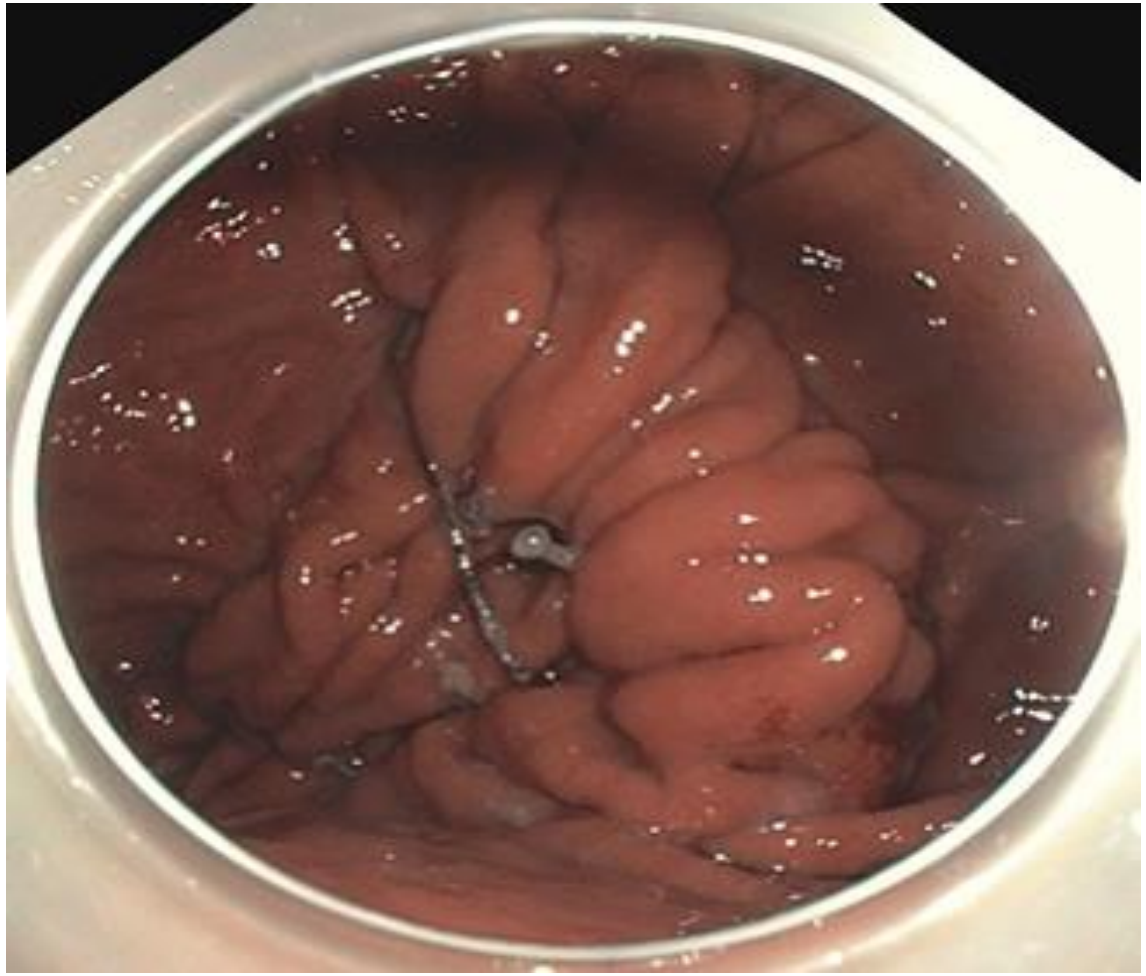
RESULTS: SAFETY

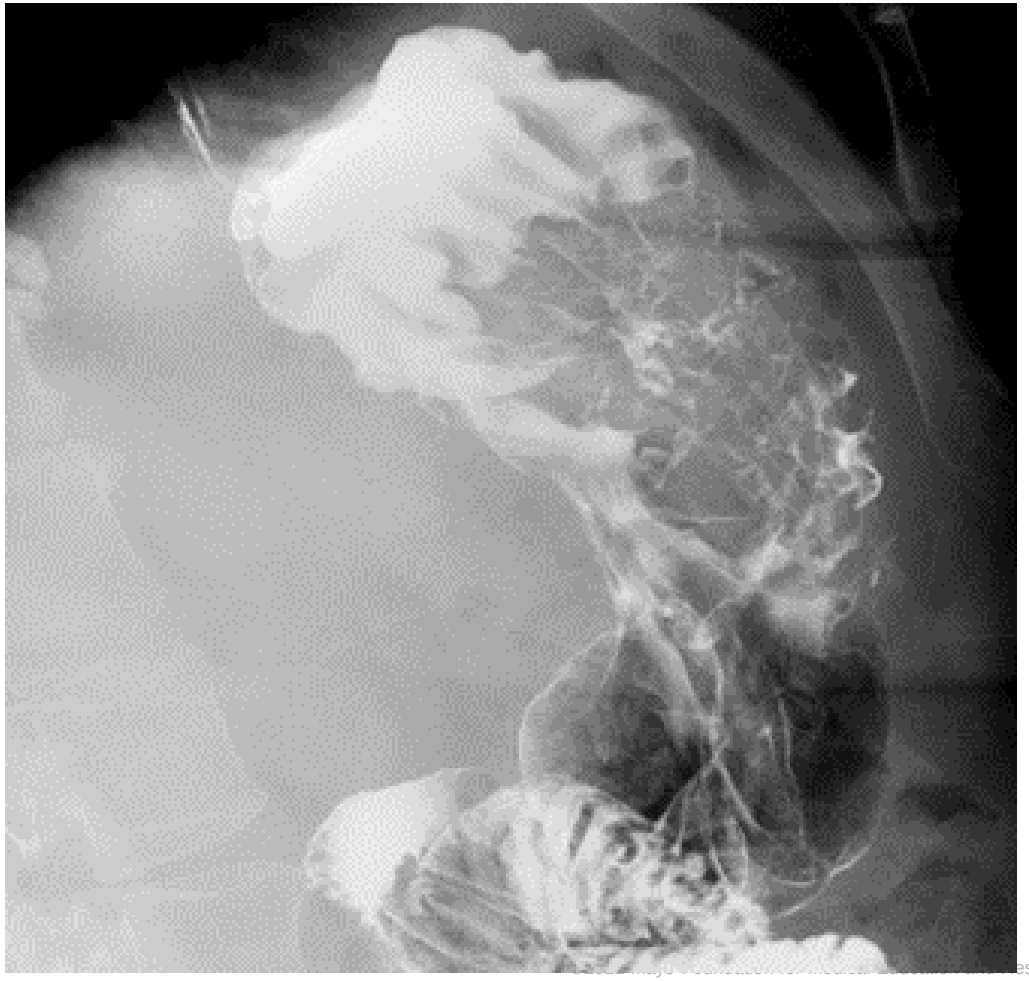
NO SAEs related to the device or procedure



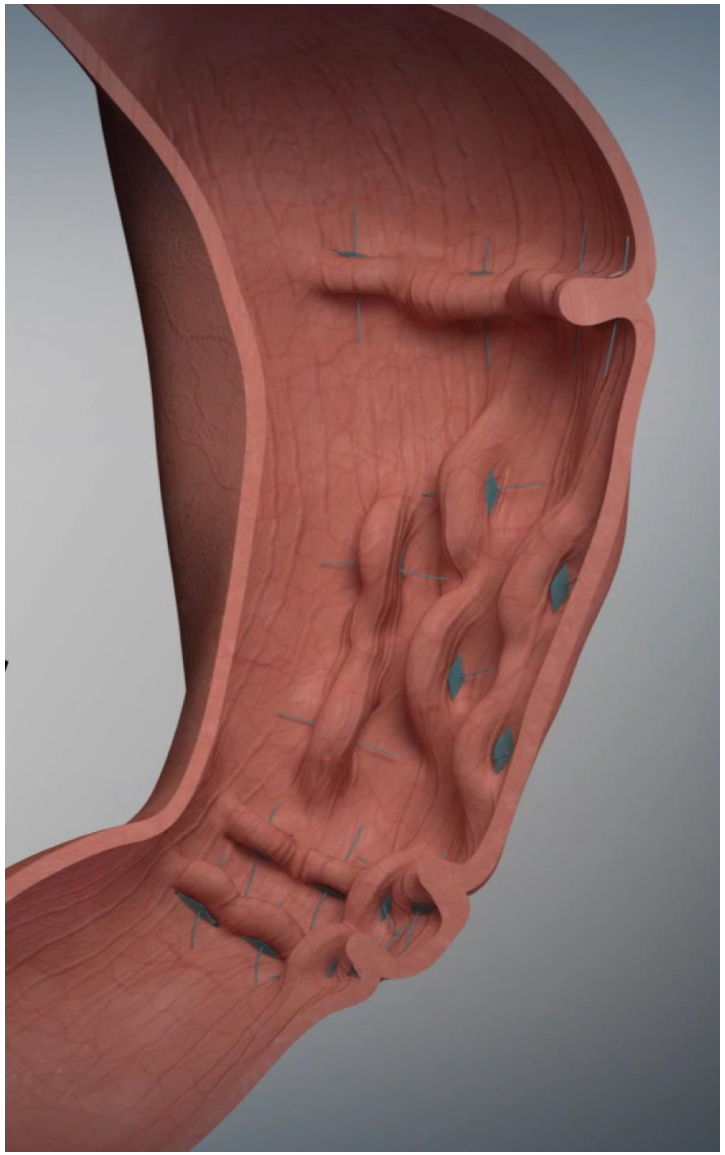
RESULTS: DURABILITY

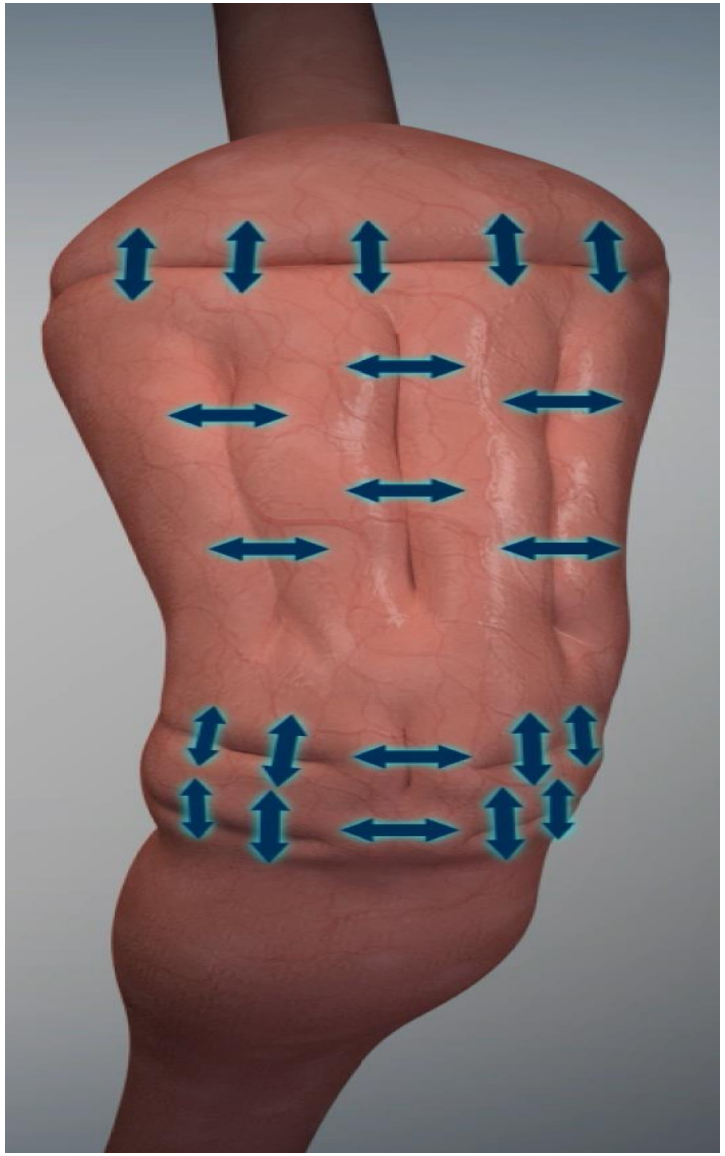
All Plications Intact + No pathologic Finding on EGD





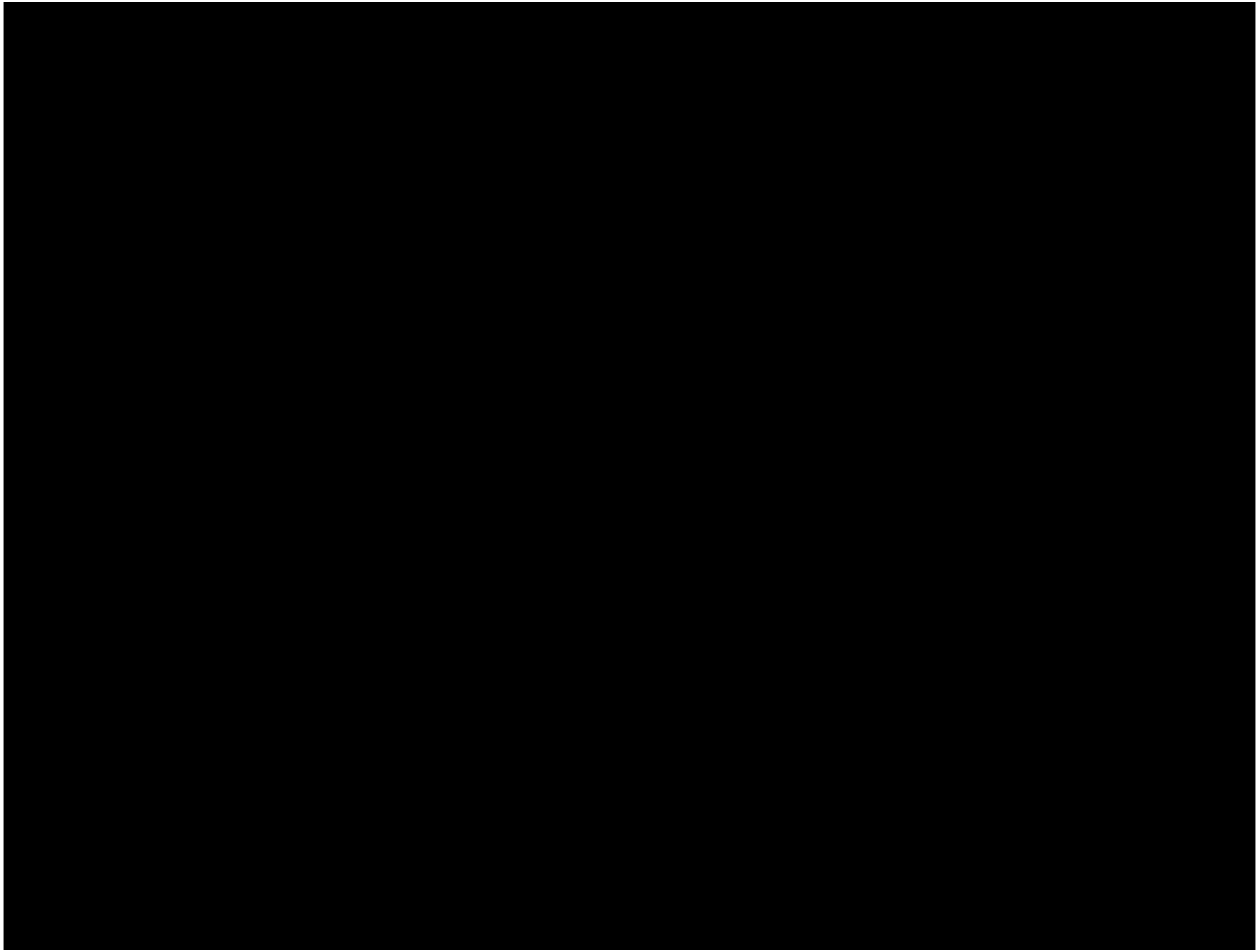
POSE2.0 (18-21 PLICATIONS)





POSE2.0*et*: Can We??

- Match LSG durability
- Anatomy sparing + less GERD
- Scalable + Economic (6-8 plications)
- Maintain surgical conversion options



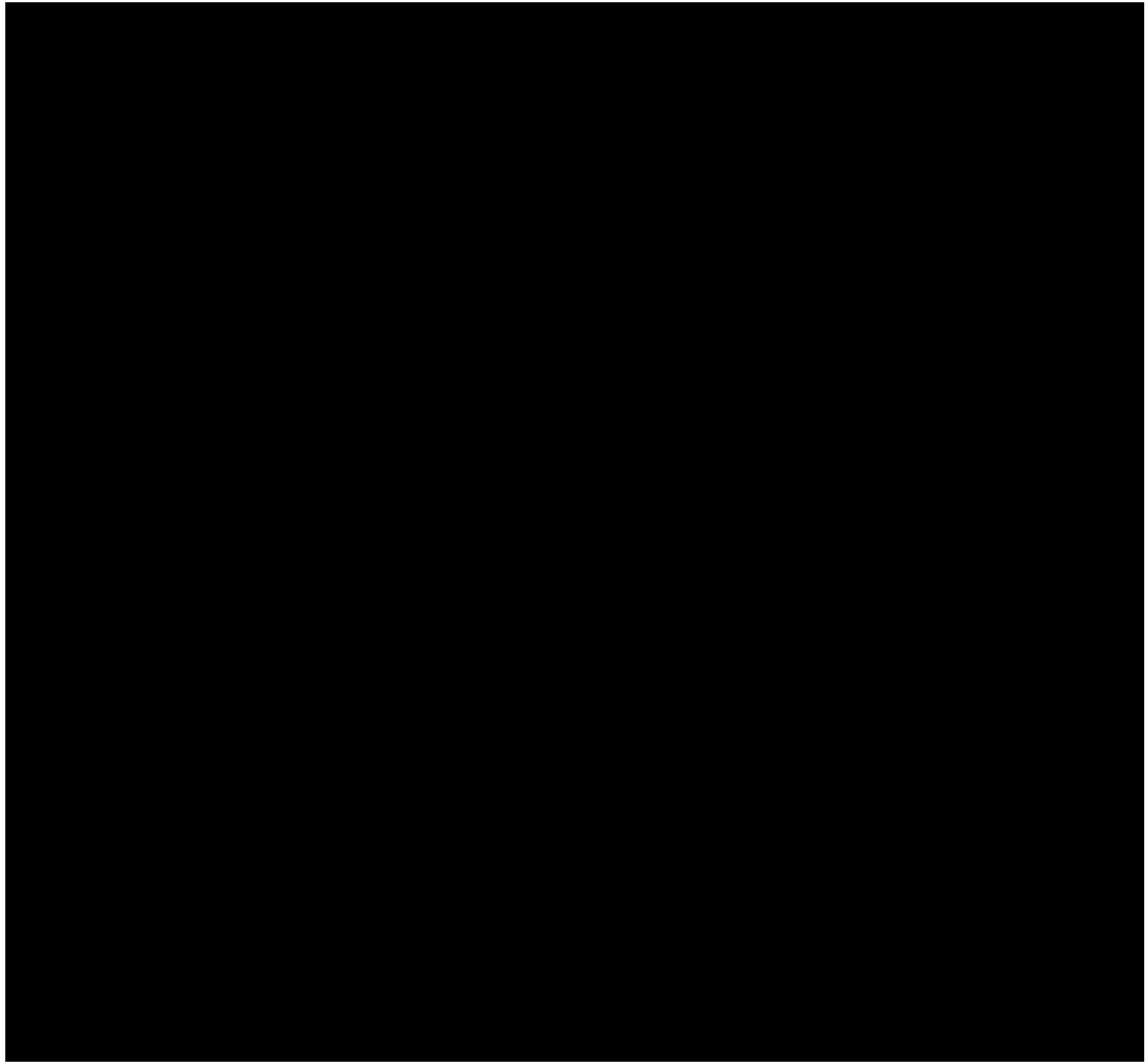
› Obes Surg. 2023 Apr 17. doi: 10.1007/s11695-023-06569-4. Online ahead of print.

The Primary Obesity Surgery Endoluminal 2.0 Enfolding Technique (POSE 2.0et): Modification to Enhance Efficiency and Increase Restriction

Maryam Al Khatry [1 2], Barham K Abu Dayyeh [3 4]

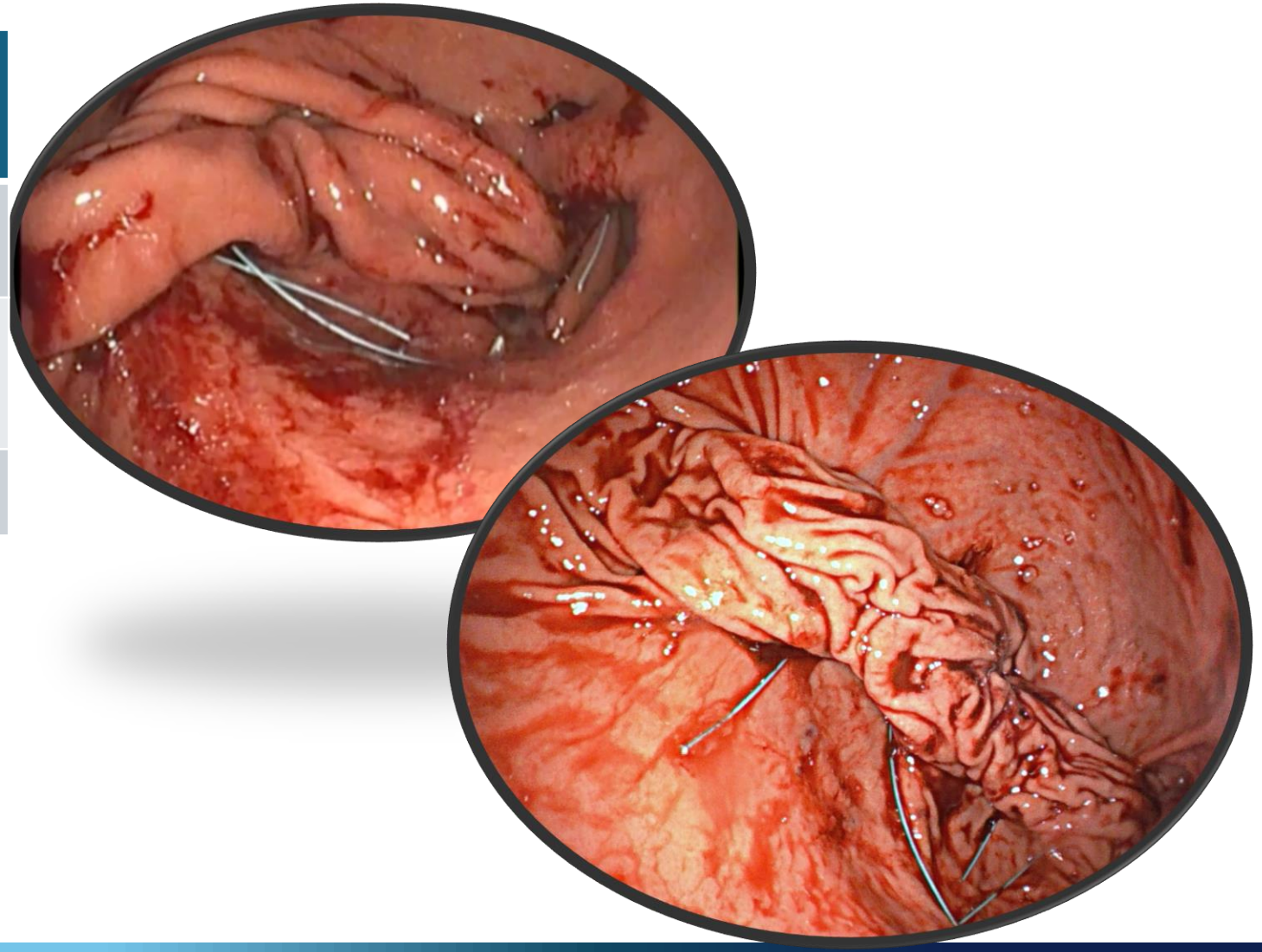
Affiliations + expand

PMID: 37067685 DOI: 10.1007/s11695-023-06569-4



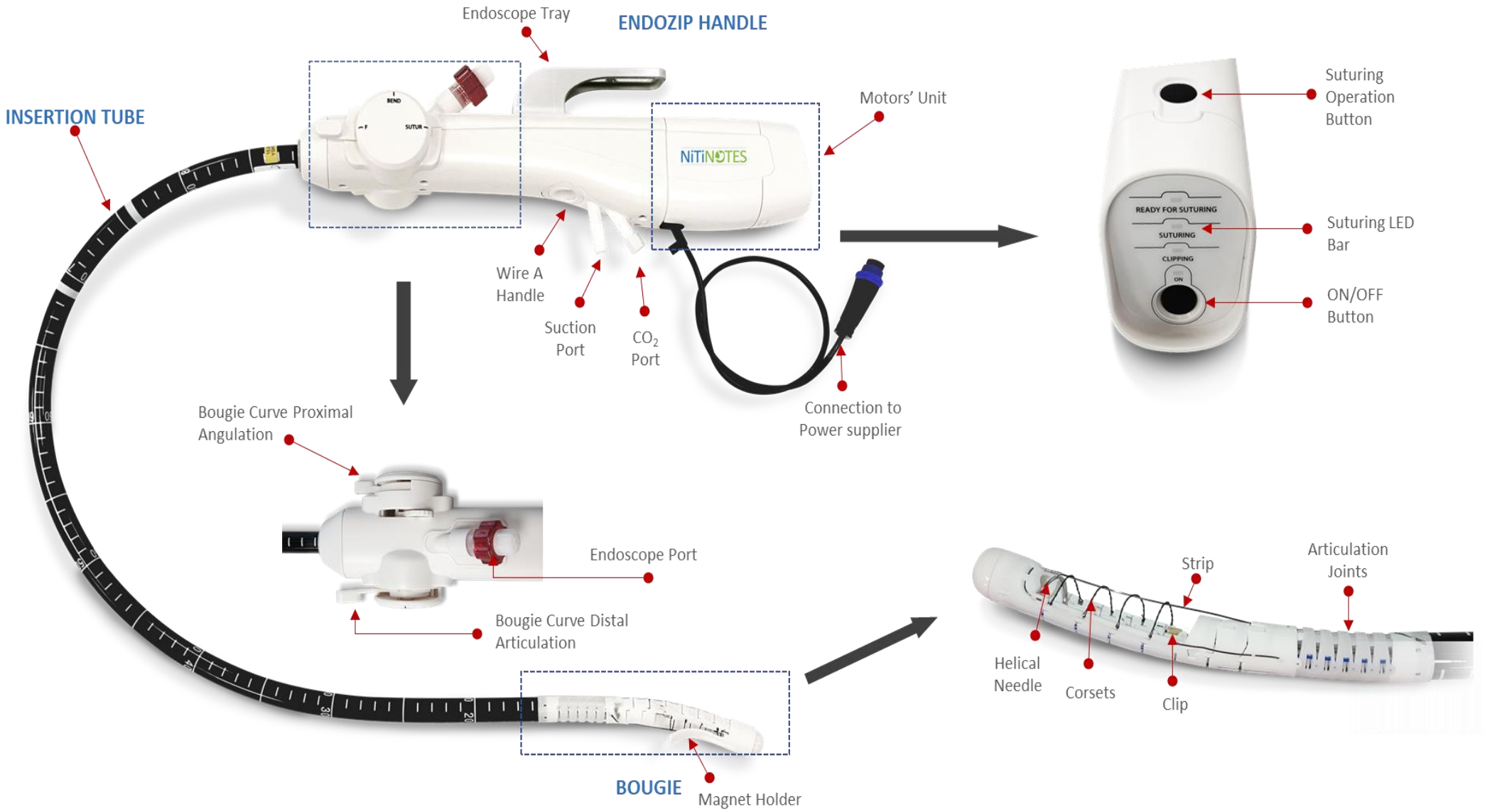
Dr. Toman Turro Mega Procedure

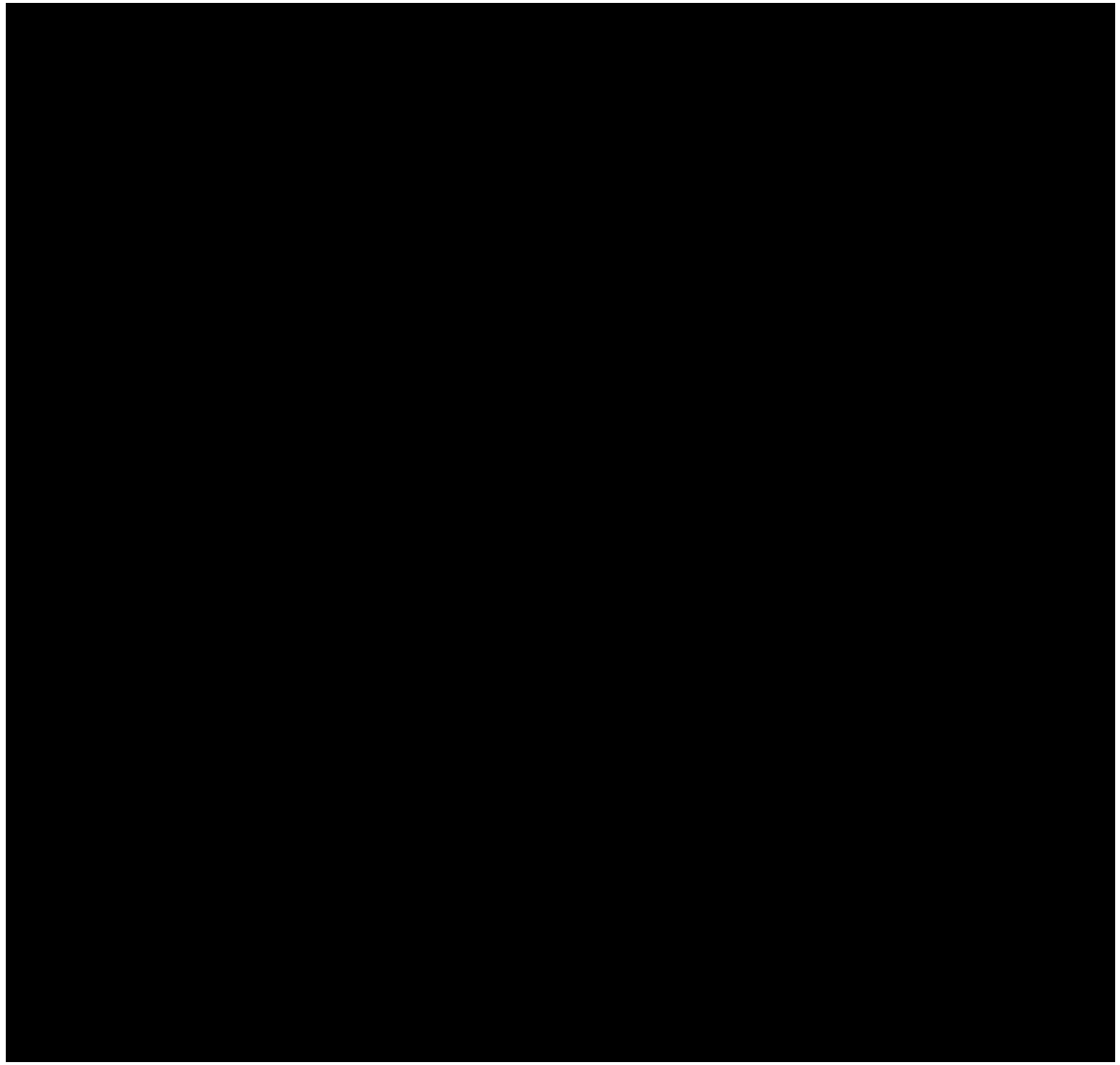
THE MEGA PROCEDURE	
% TBWL AT 6 MONTHS (13 / 20)	**16,1% ± 3,9**
RESPONDER RATE (> 10 % AT 6 MONTHS)	**91,2 %**
AVERAGE **TIME**	25 MIN

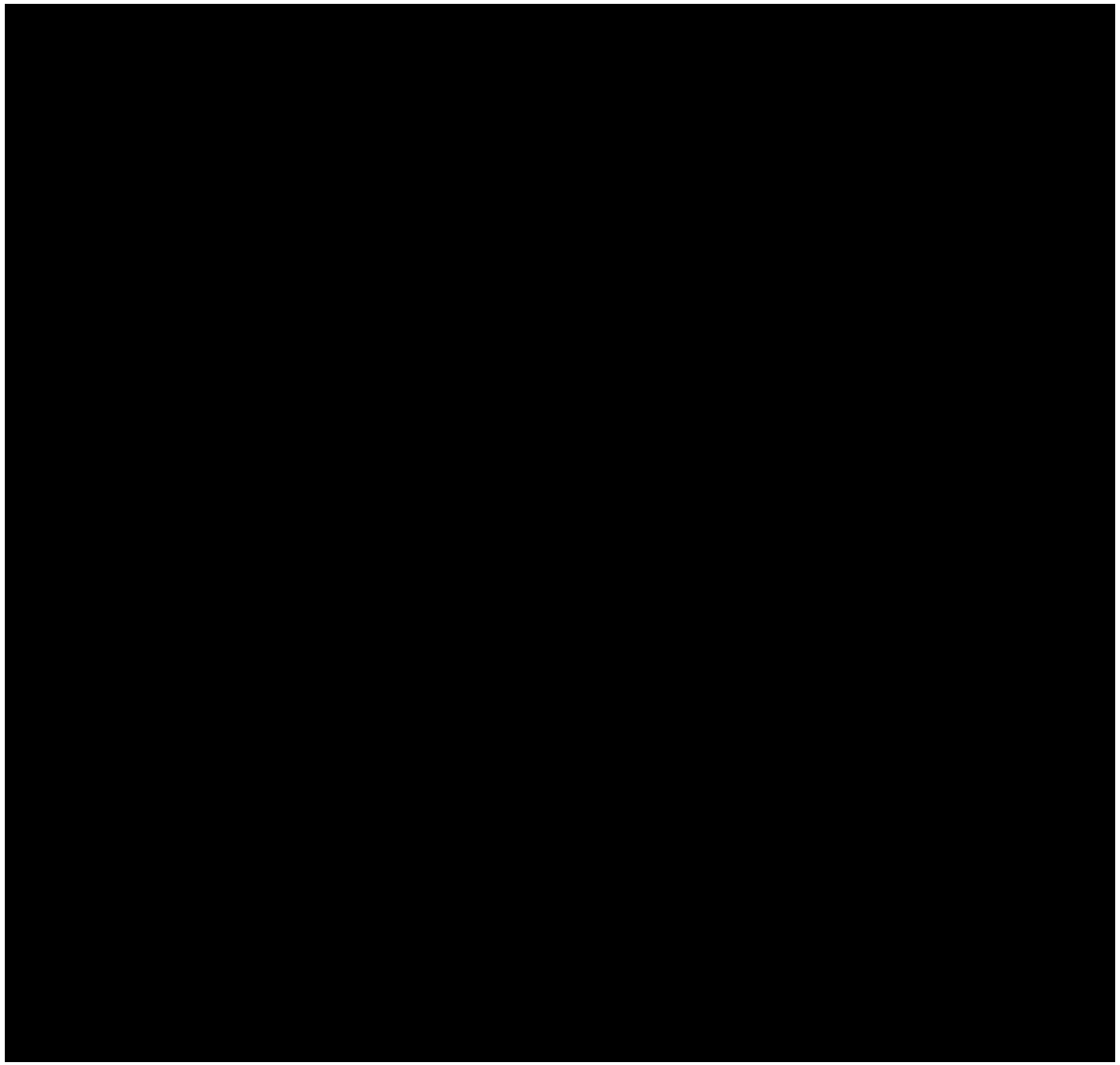


- NO SEVERE ADVERSE EVENTS REPORTED
- REDUCTION OF AN AVERAGE OF 8 SUTURES PER CASE
- NO INCREASE OF THE HOSPITALIZATION OR MEDICATION

Endozip™ – Automated Suturing Device







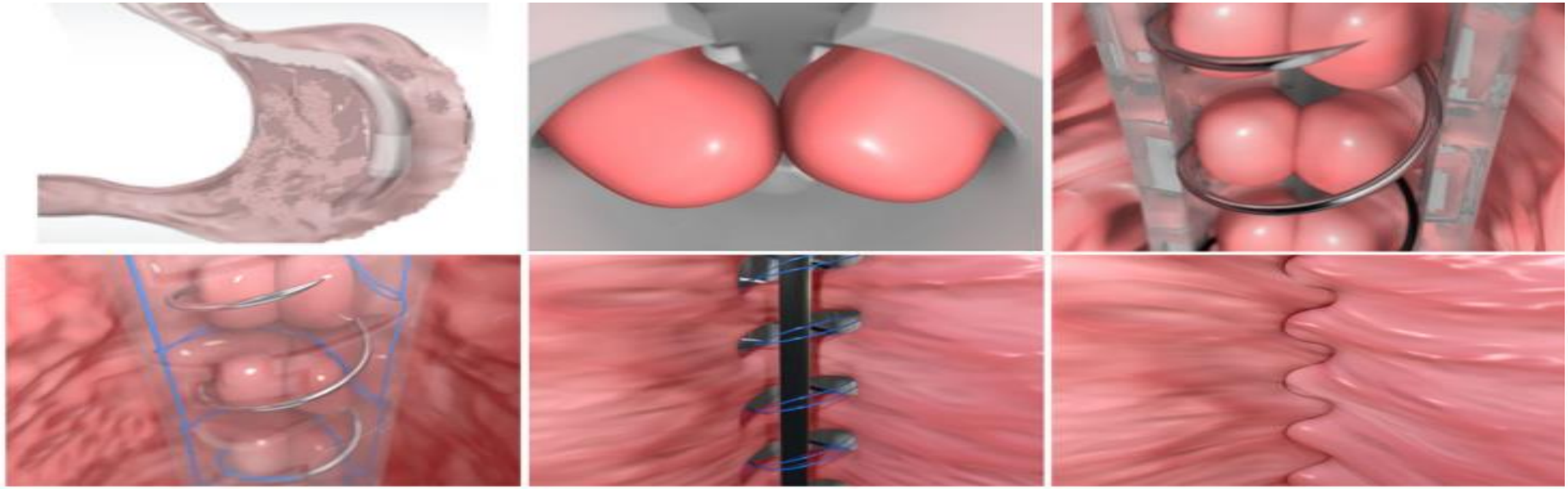
Courtesy of Ivo Boskoski

Obesity Surgery (2020) 30:1696–1703
https://doi.org/10.1007/s11695-019-04370-w

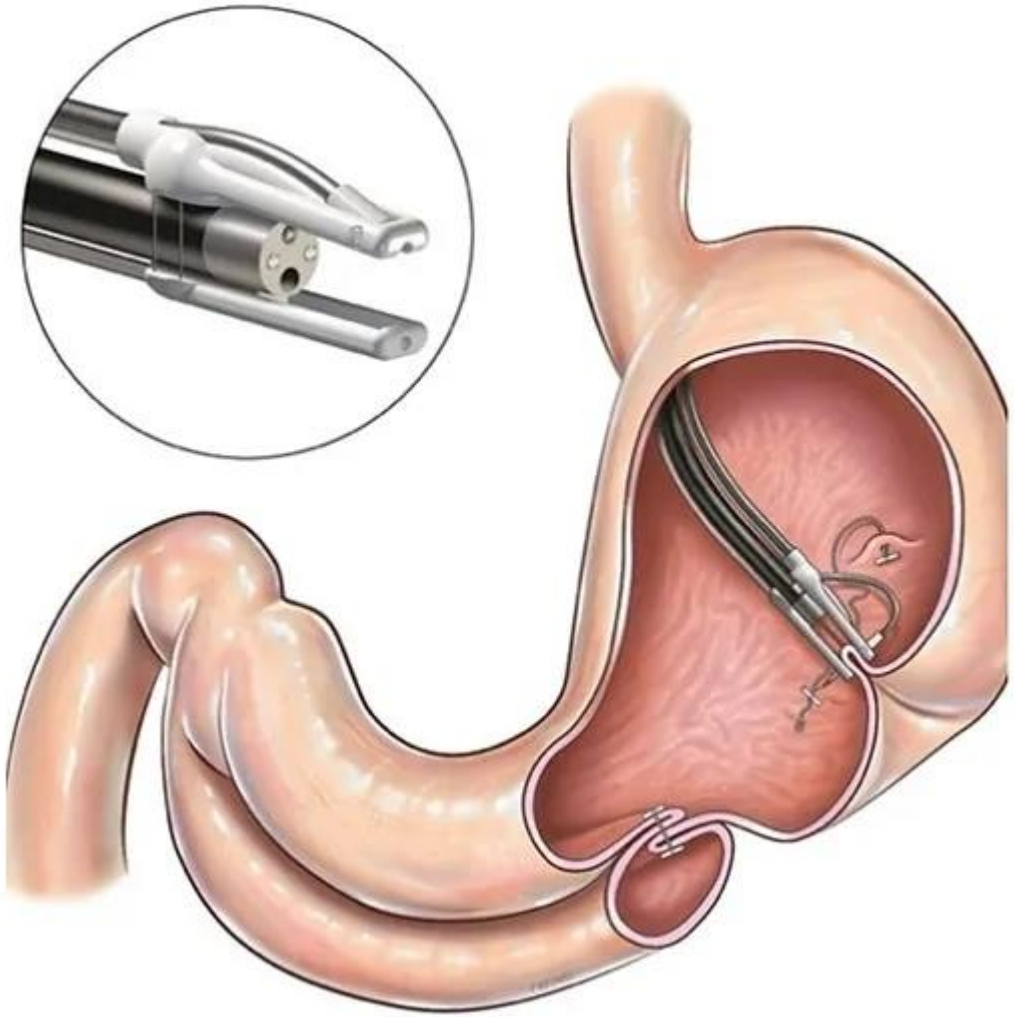
ORIGINAL CONTRIBUTIONS

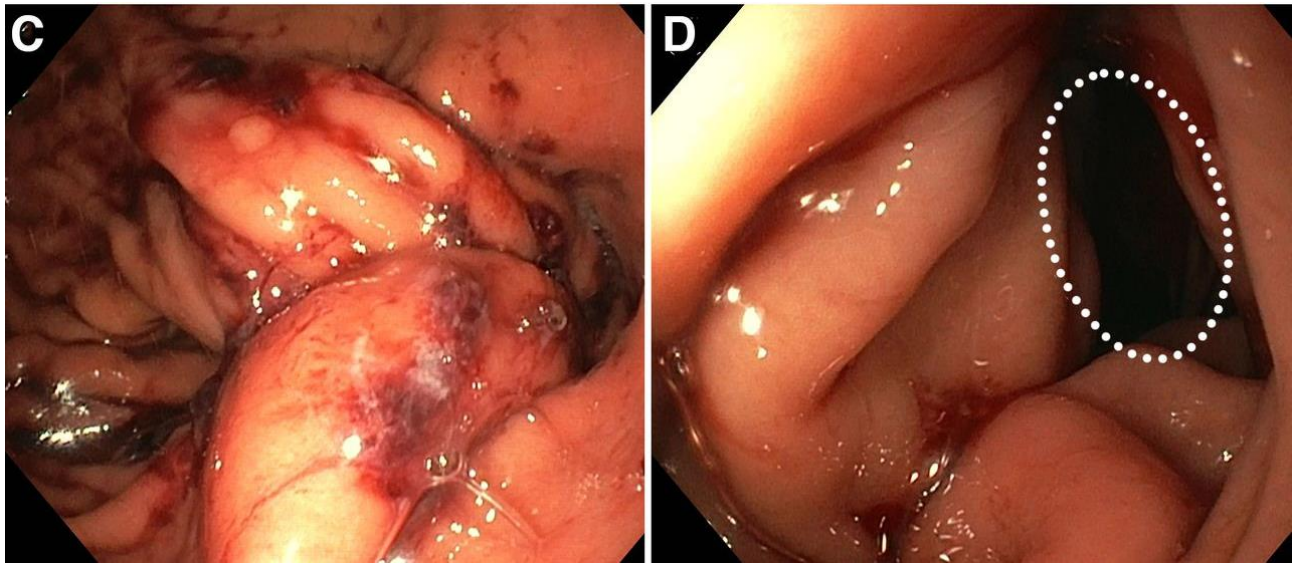
Safety and Feasibility of a Novel Endoscopic Suturing Device (EndoZip TM) for Treatment of Obesity: First-in-Human Study

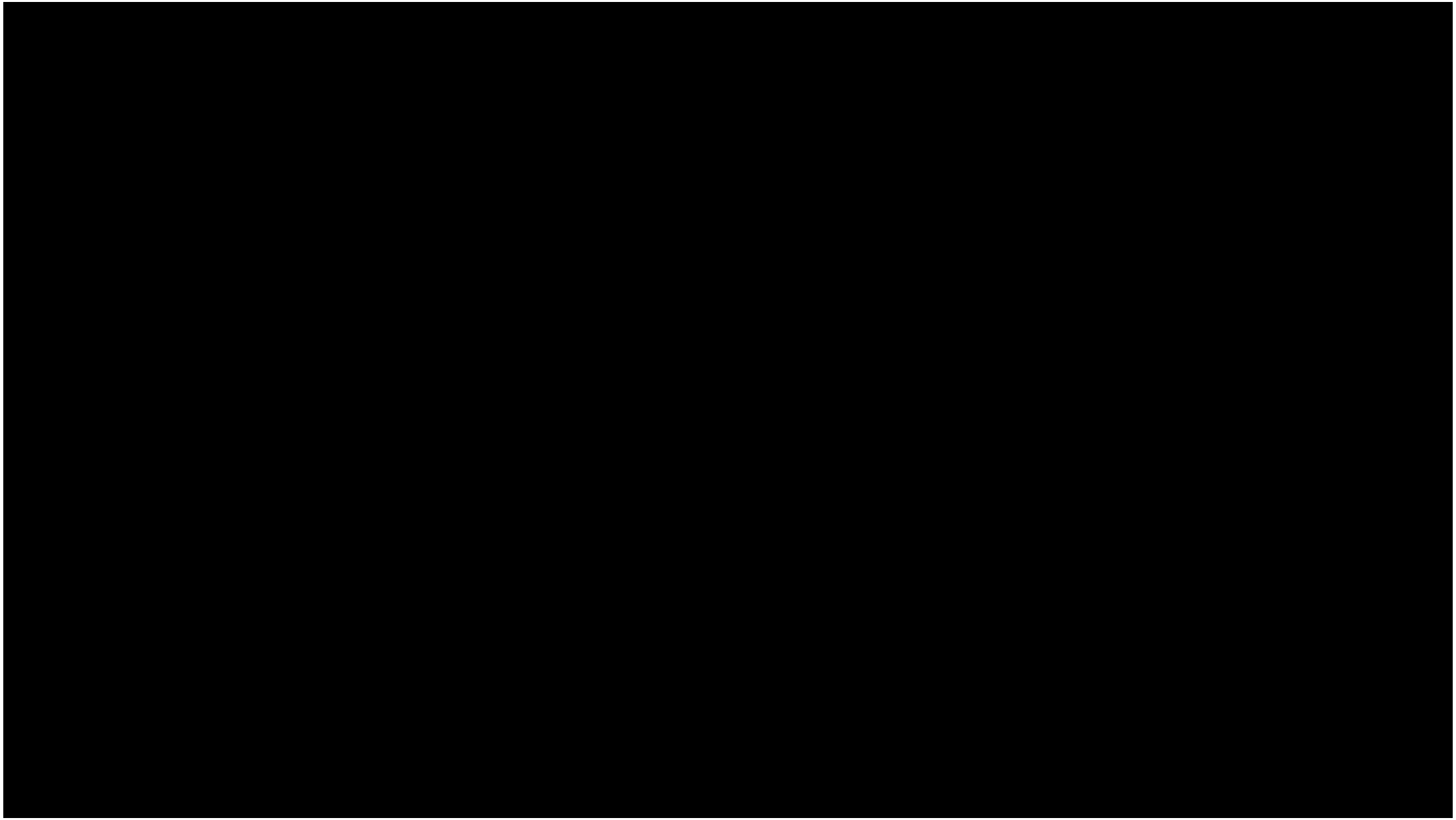
Gontrand Lopez-Nava[1] · Ravishankar Asokkumar[1,2] · Angel Rull[1] · Fernandez-Corbelle[1] · Inmaculada Bautista[1] · Barham Abu Dayyeh[3]



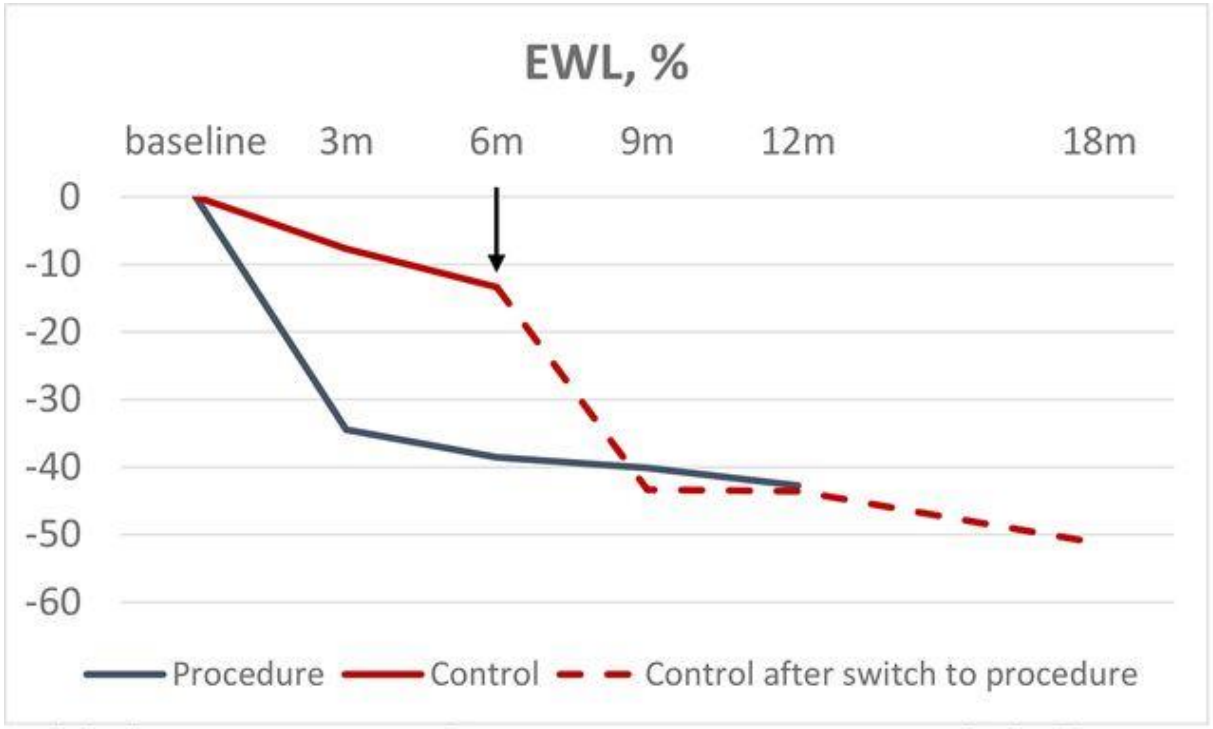
Endomina Procedure

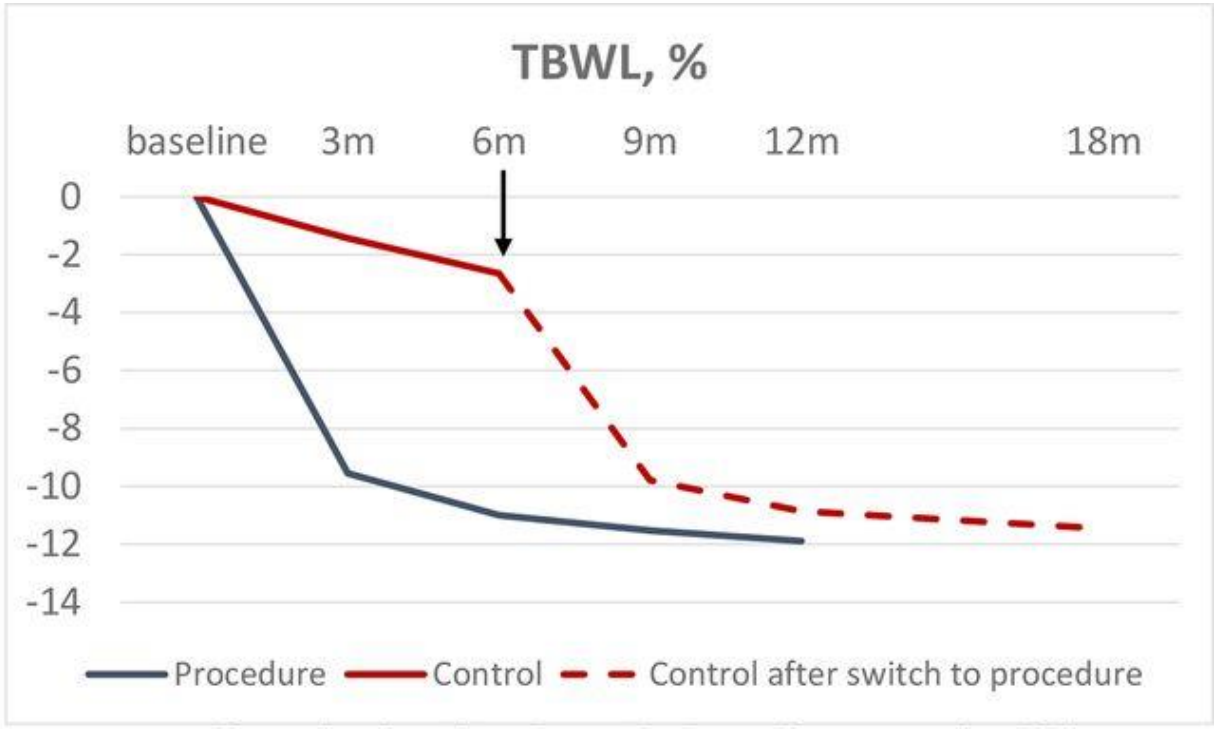






Results

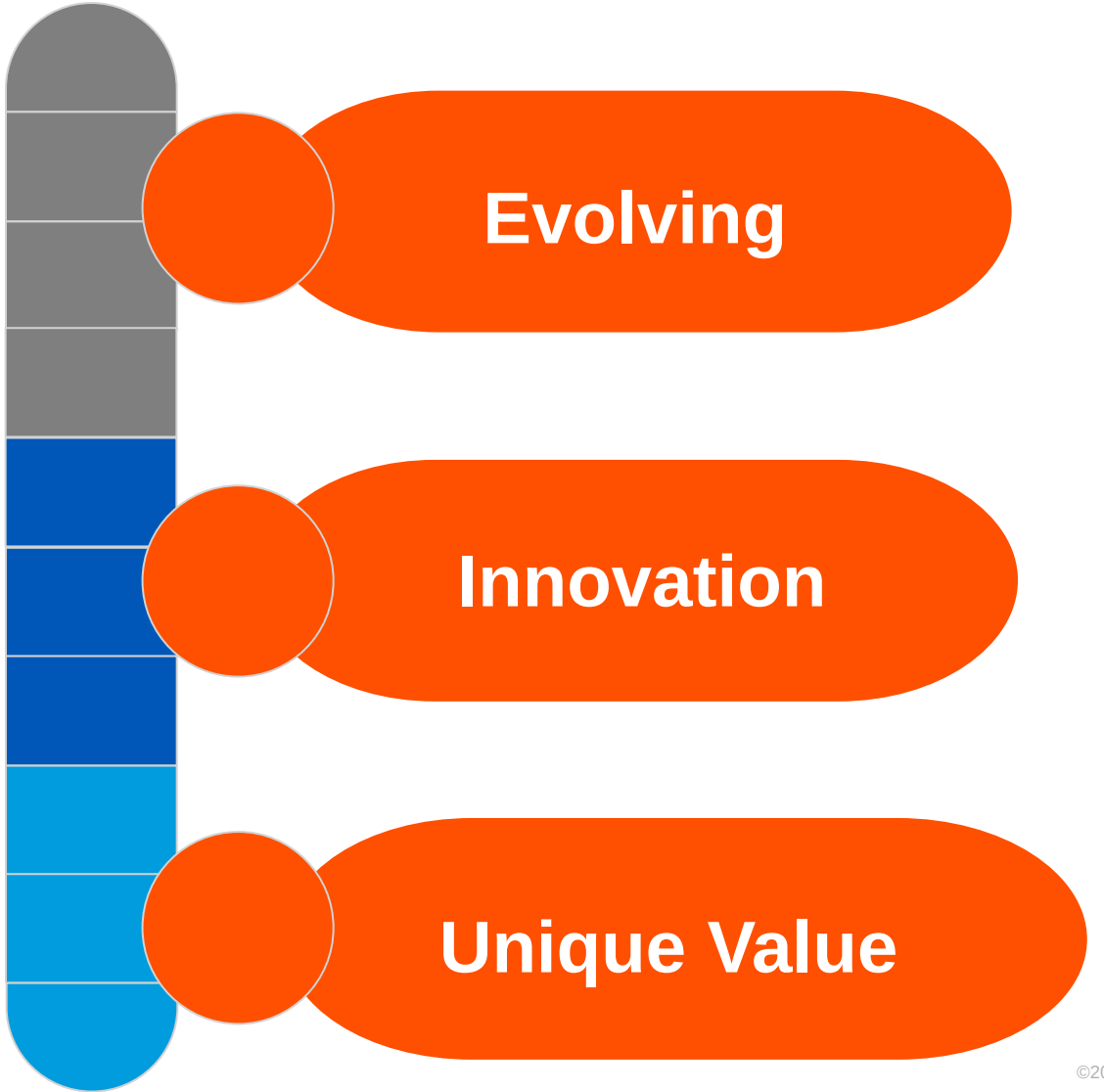




Vincent Huberty et al. Gut 2021;70:1479-1485

GUT

Conclusions



QUESTIONS

THANK YOU

