

2021 SCSG⁷ GI SYMPOSIUM^L

Current Status of Endoscopic Anti-Reflux Procedures

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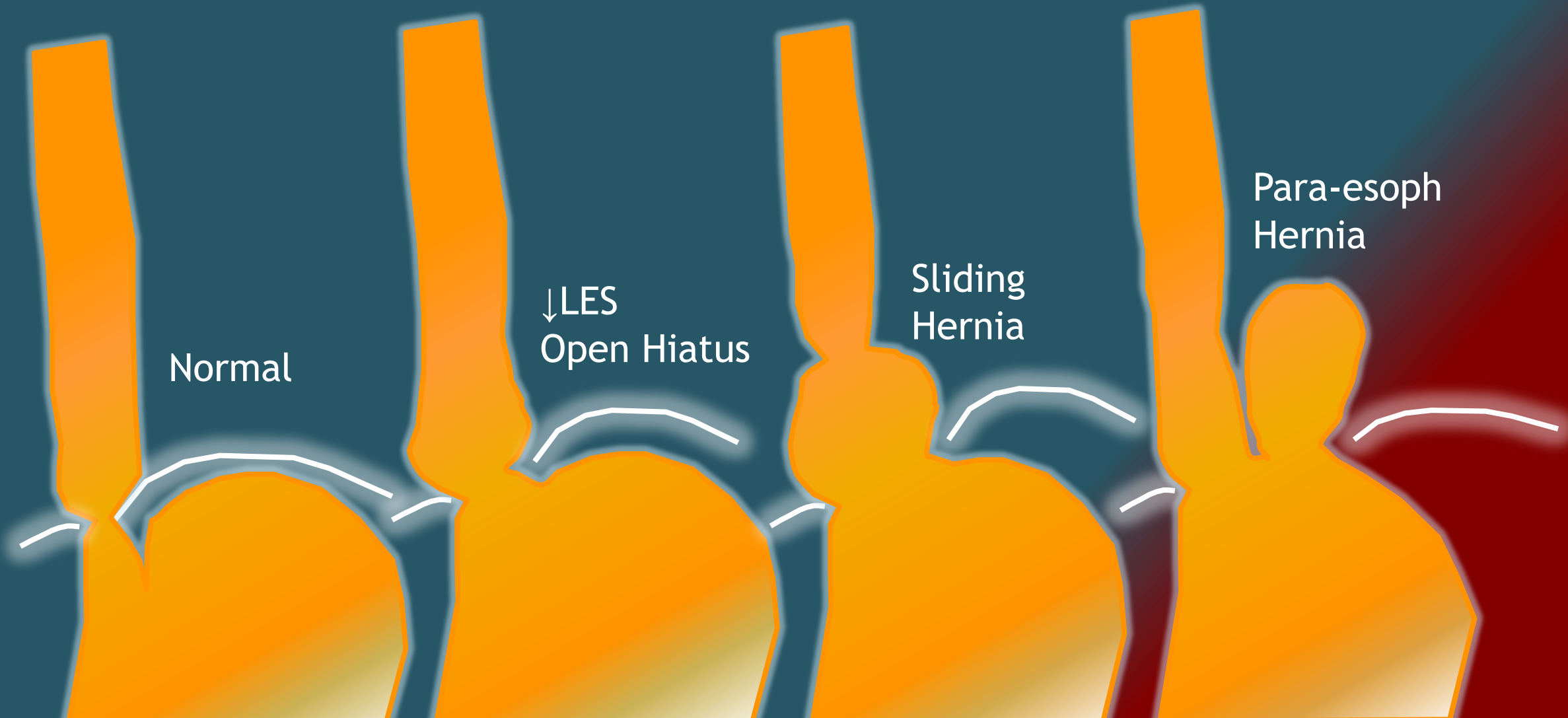
University of California, Irvine

Disclosures

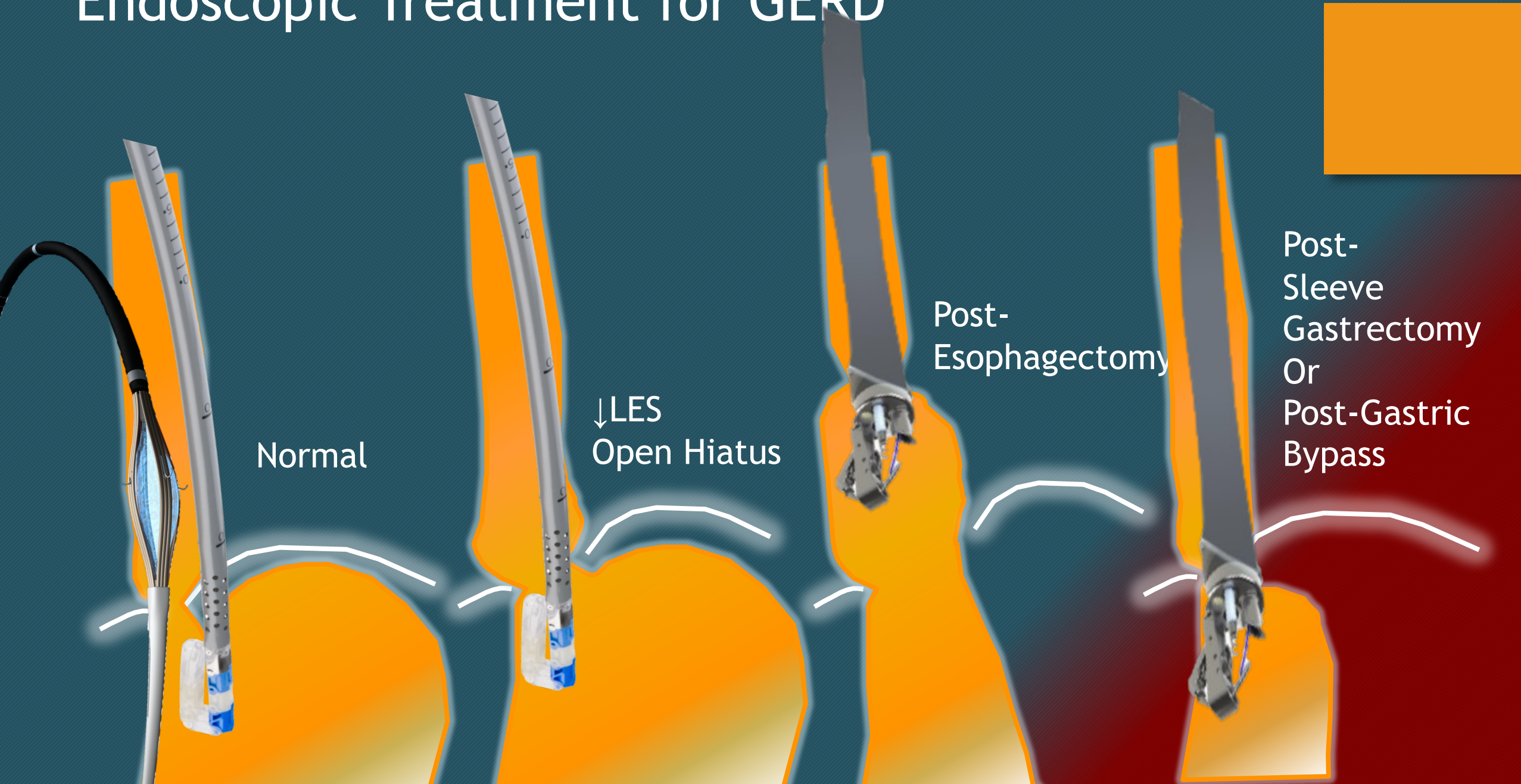
- Apollo
- Boston Scientific
- Cook
- Covidien
- Erbe
- Endogastric Solutions
- Mauna Kea
- Mederi
- Medtronic
- Olympus
- Ovesco
- Pentax
- Torax



The GERD Spectrum



Endoscopic Treatment for GERD



Which of the 3 anti-reflux components needs fixing?

(1) Reduce the hernia

(2) Repair the crura

(3) Augment the LES - re-create “flap valve”

(Laparoscopic vs Endoscopic)

Anti-GERD procedural options

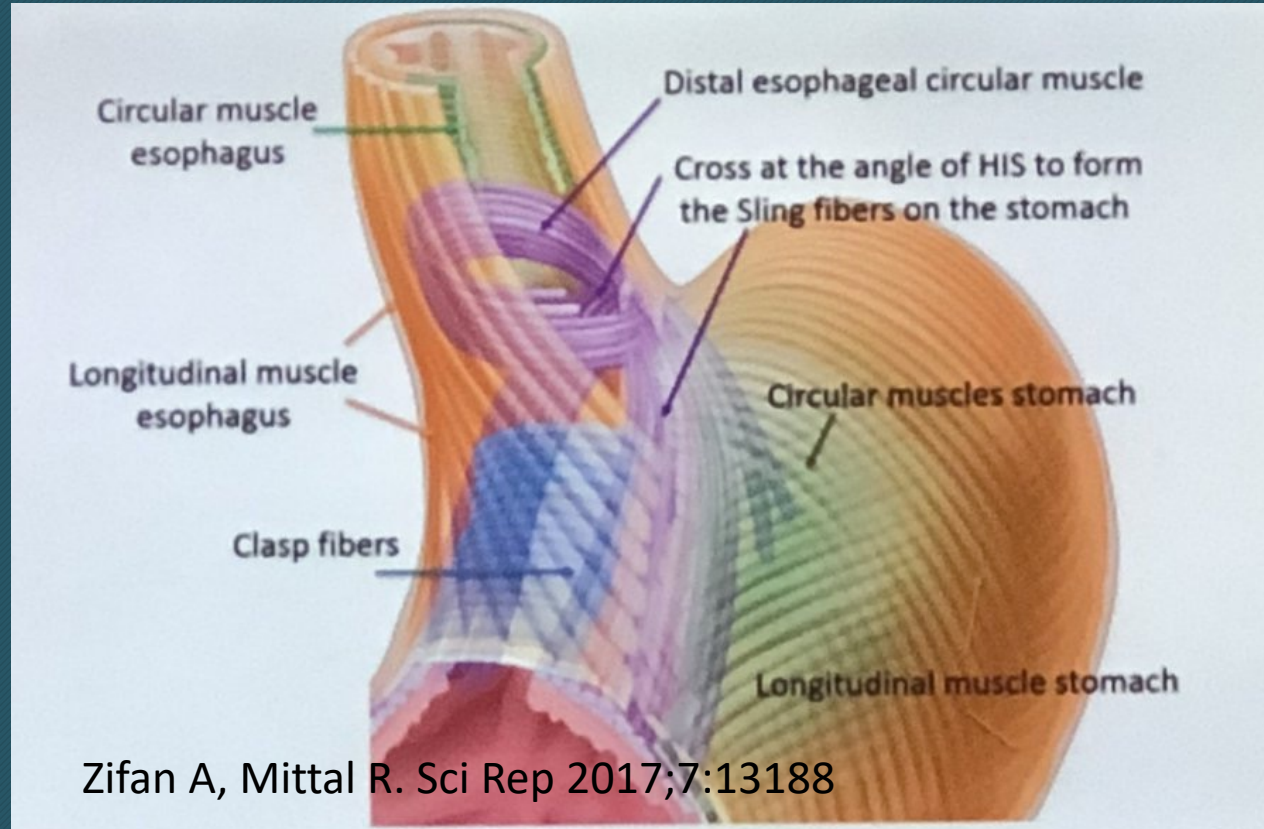
- Stretta RF procedure
- MASE, RAP, ARMS, GERD-X
- Esophyx TIF procedure
- Hernia Repair + TIF
- Hernia Repair + Total Fundoplication (Nissen)
- Hernia Repair + Magnetic Augmentation (Linx)
- Hernia Repair + Partial Fundoplication

Endoscopic

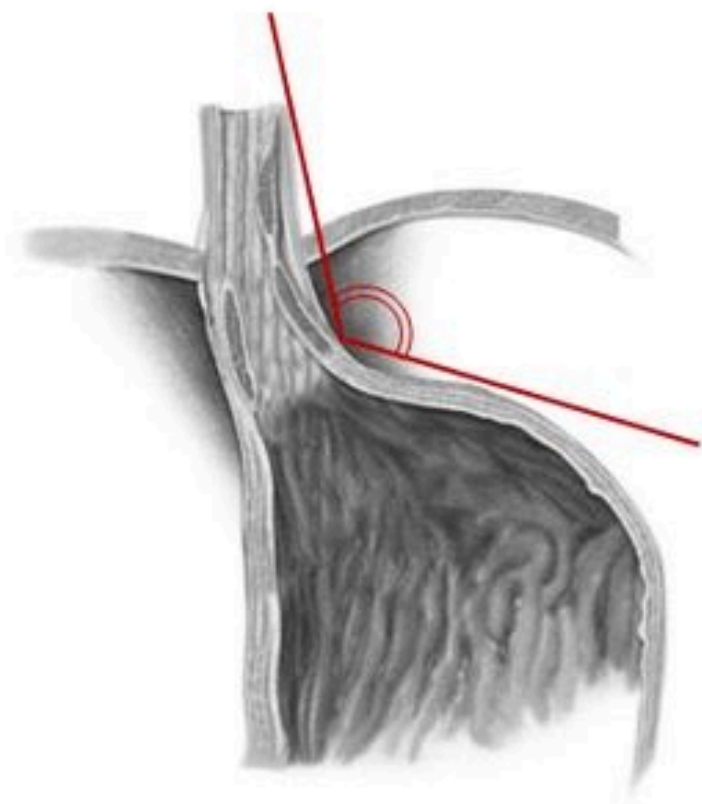
Concomitant

Laparoscopic

The LES “Flap Valve” includes the Gastric Sling Fibers



Lower Esophageal Sphincter (LES)



Endoscopic Anti-GERD procedural options

⦿ Restore entire LES/Flap Valve construct

- Esophyx TIF 2.0

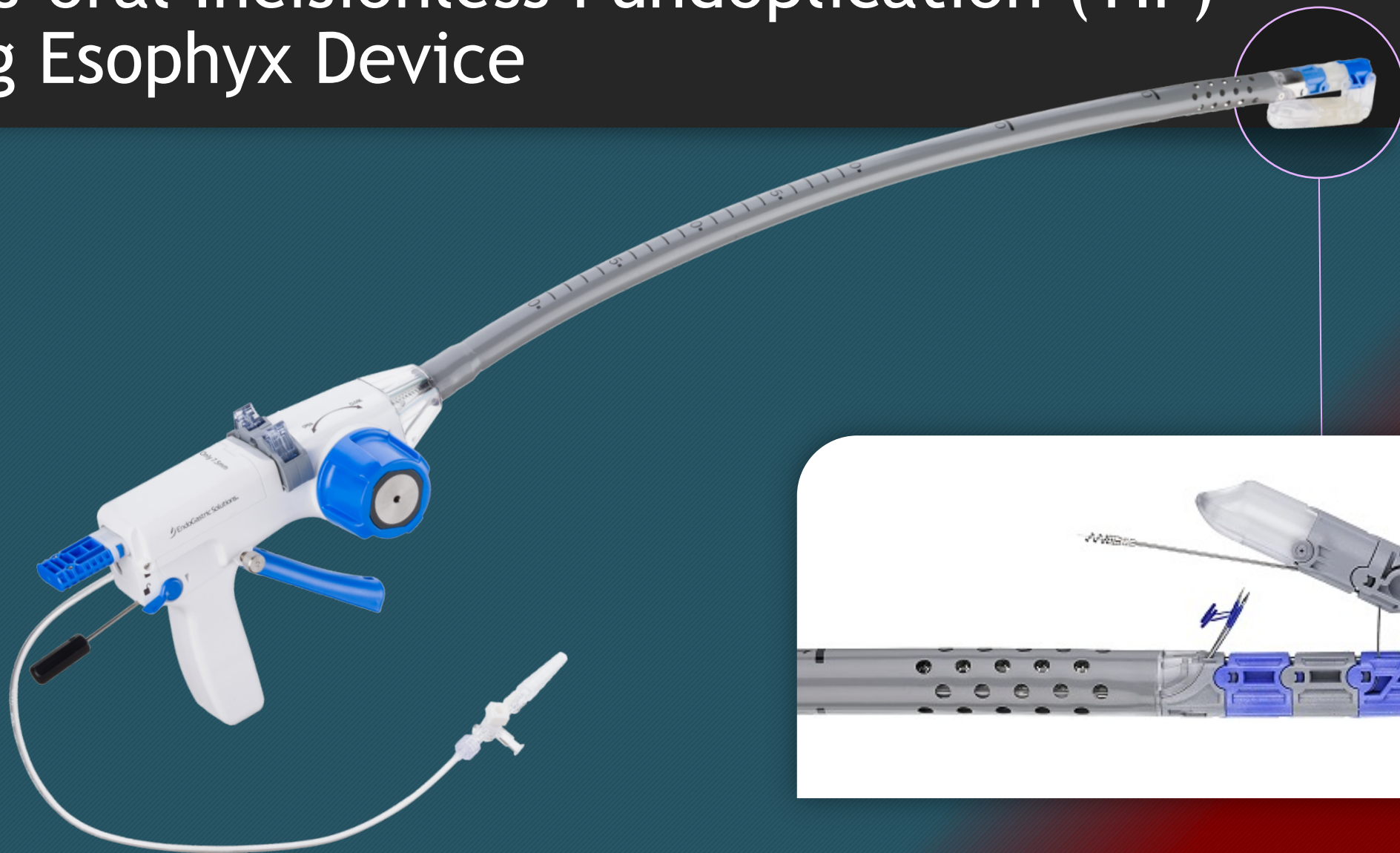
⦿ Gastro-gastric Plication

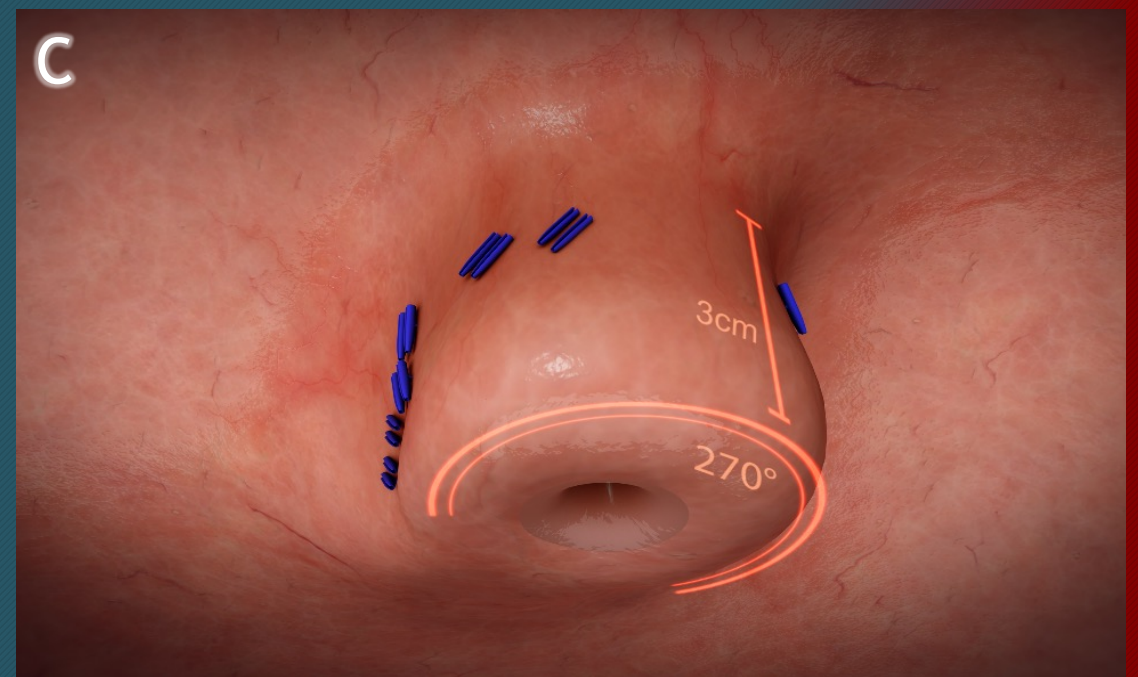
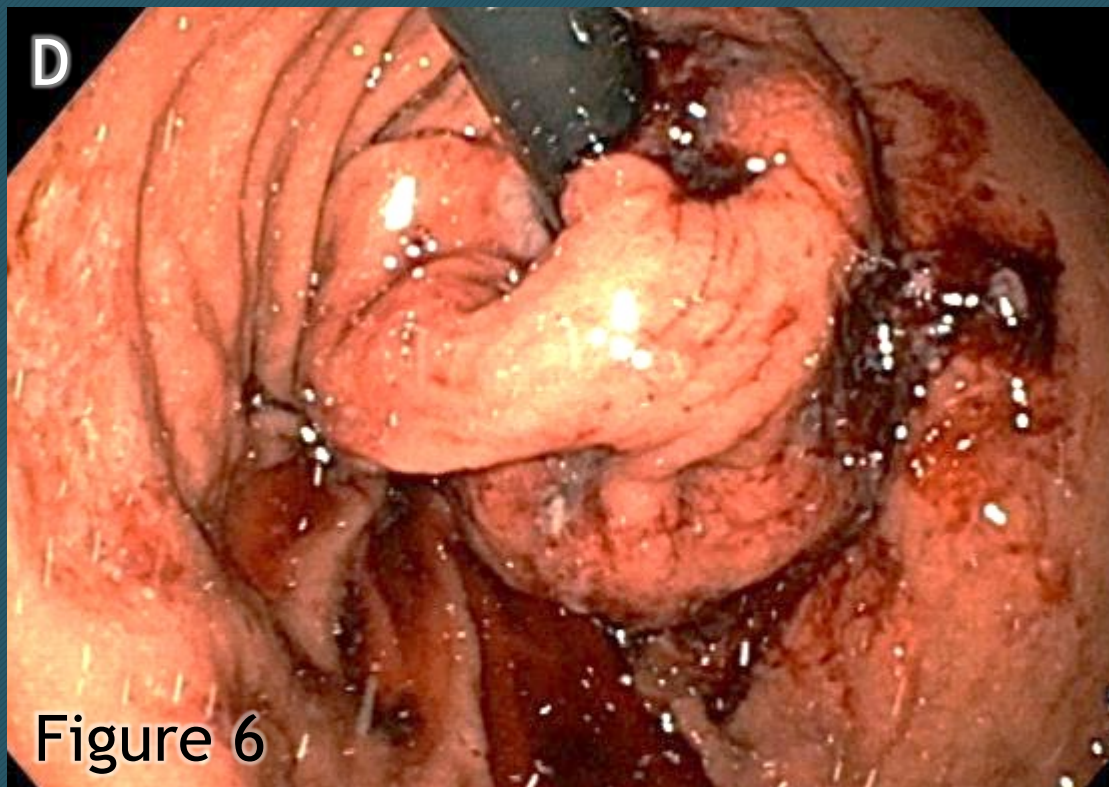
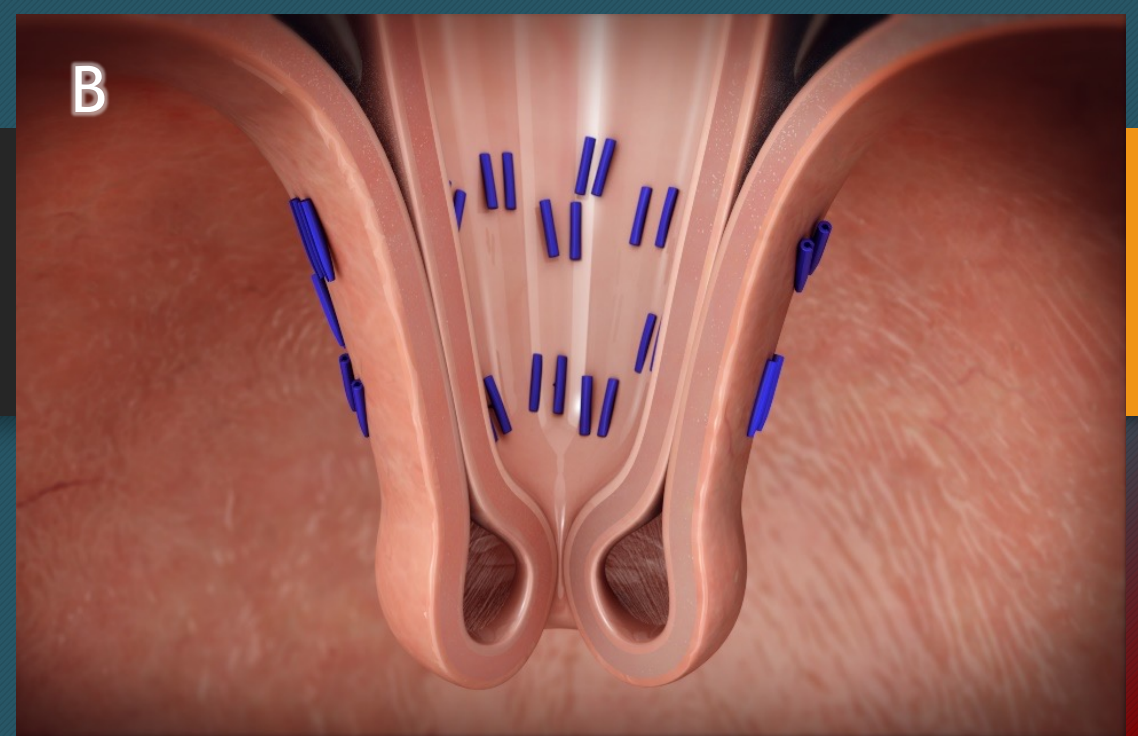
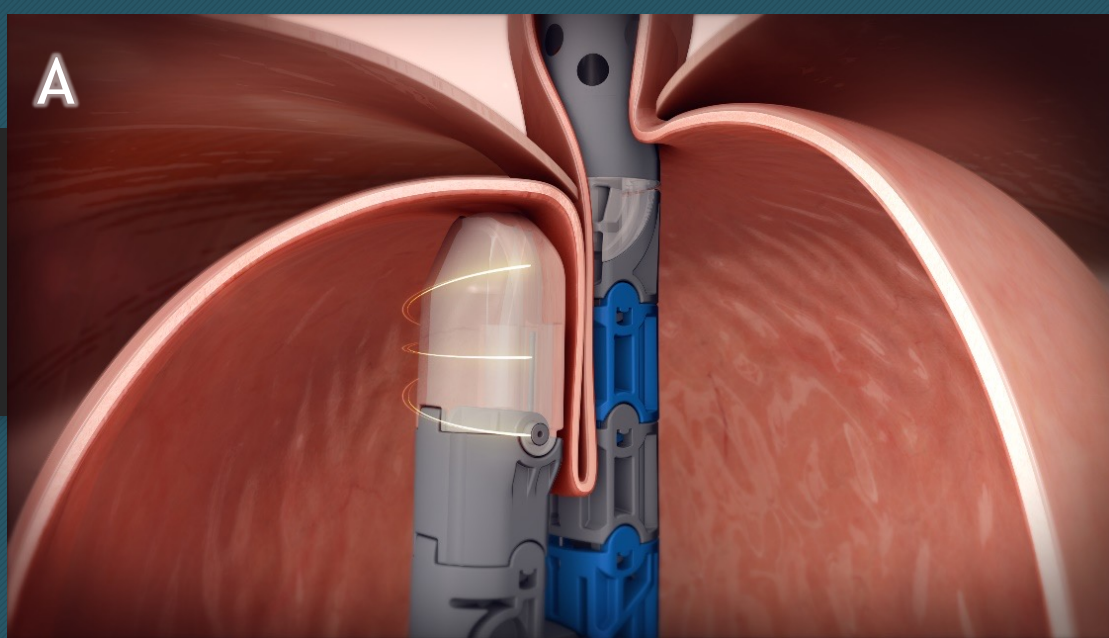
- GERD-X
- Stretta RF procedure
- MASE, RAP, ARMS



Also in Altered Anatomy

Trans-oral Incisionless Fundoplication (TIF) using Esophyx Device

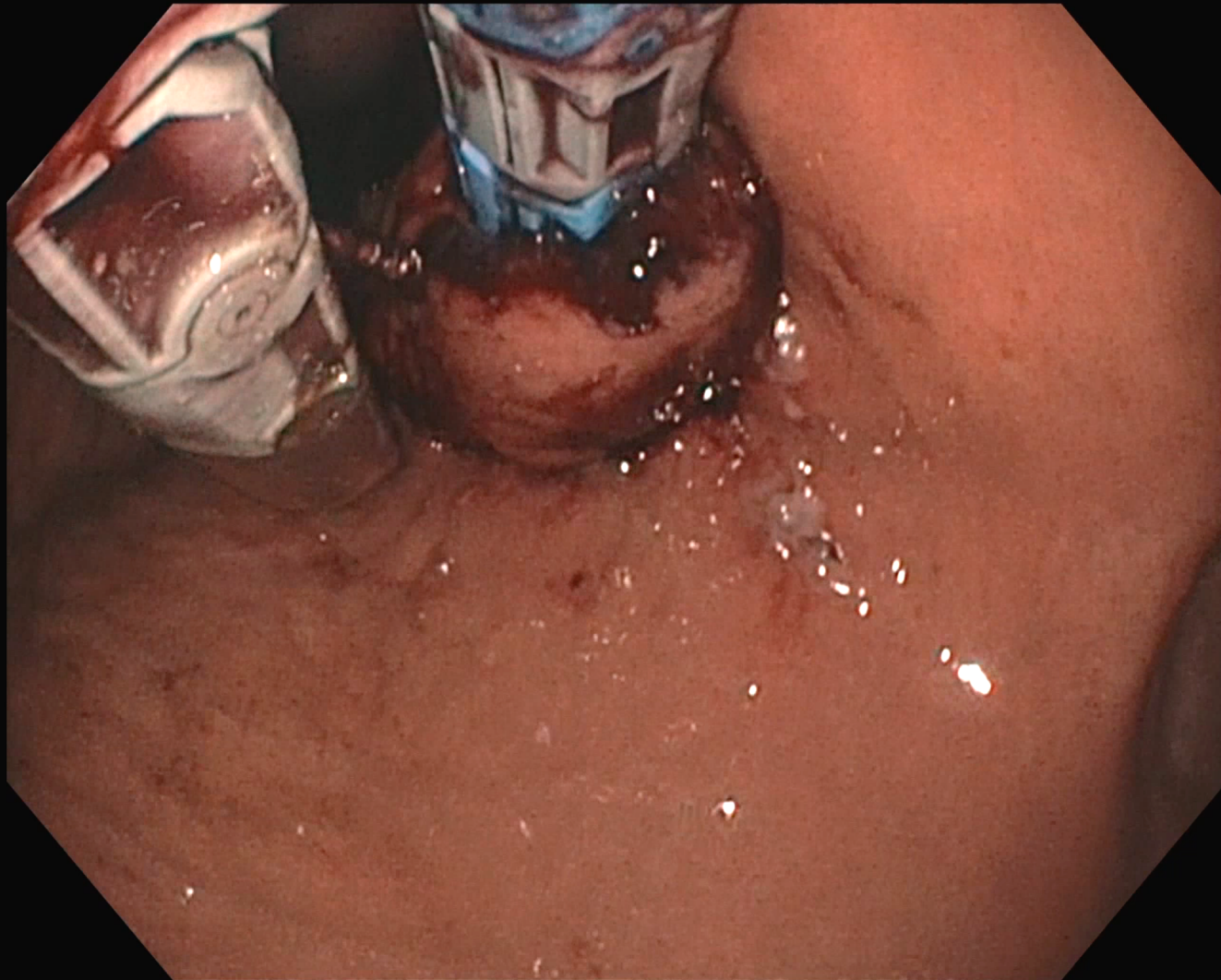




Post-POEM GERD



post-POEM TIF



Endoscopic Anti-GERD procedural options

⦿ Restore entire LES/Flap Valve construct

- Esophyx TIF 2.0

⦿ Gastro-gastric Plication

- GERD-X
- Stretta RF procedure
- MASE, RAP, ARMS



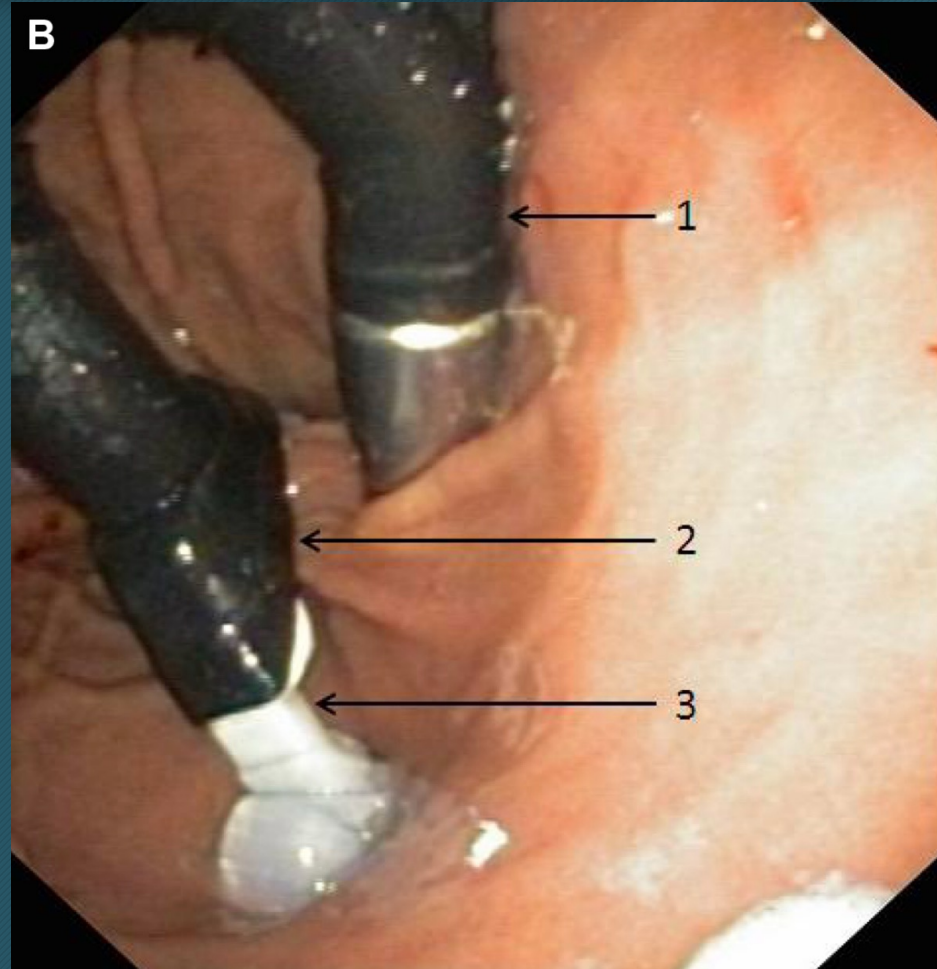
Also in Altered Anatomy

GERD-X: Gastro-gastric Plication

A

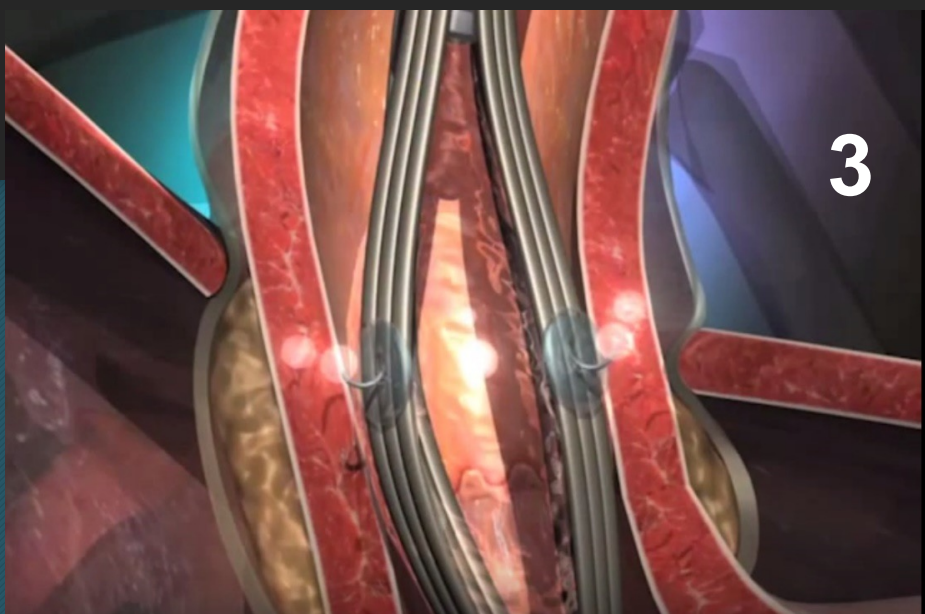
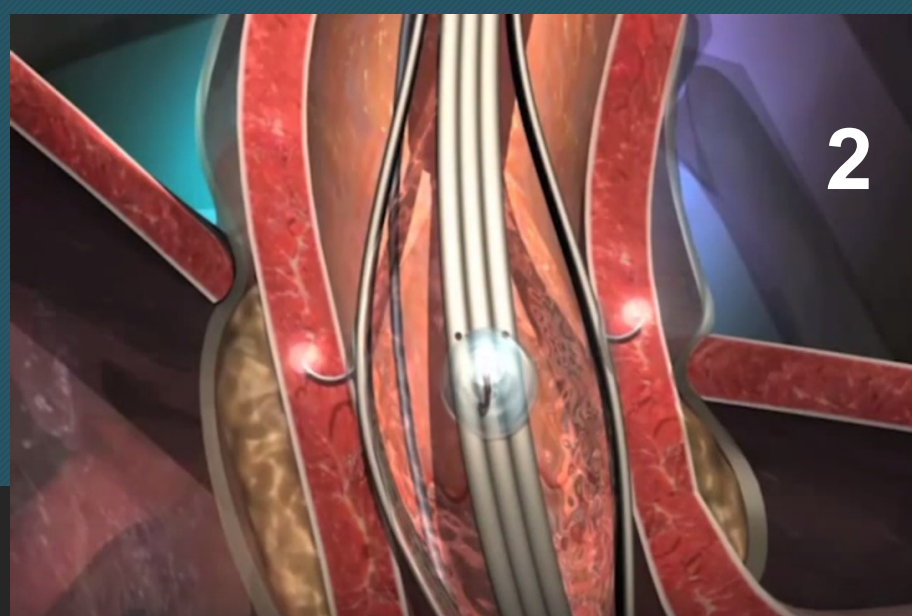
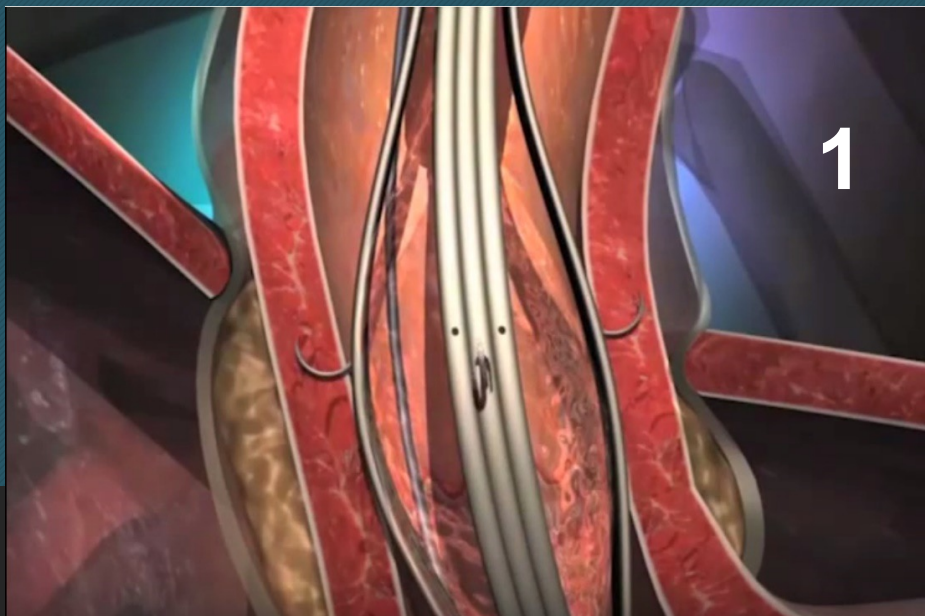


B



Stretta

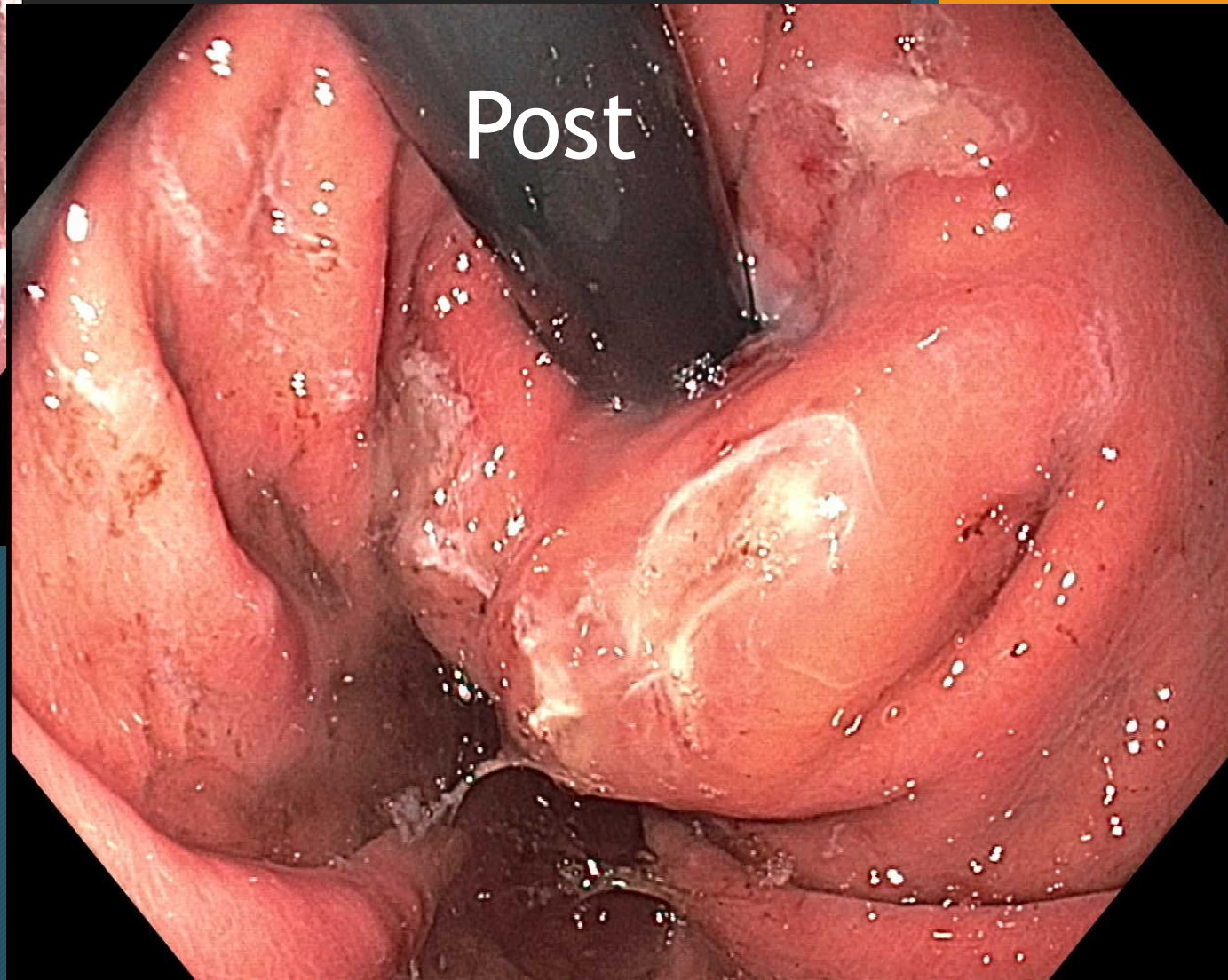
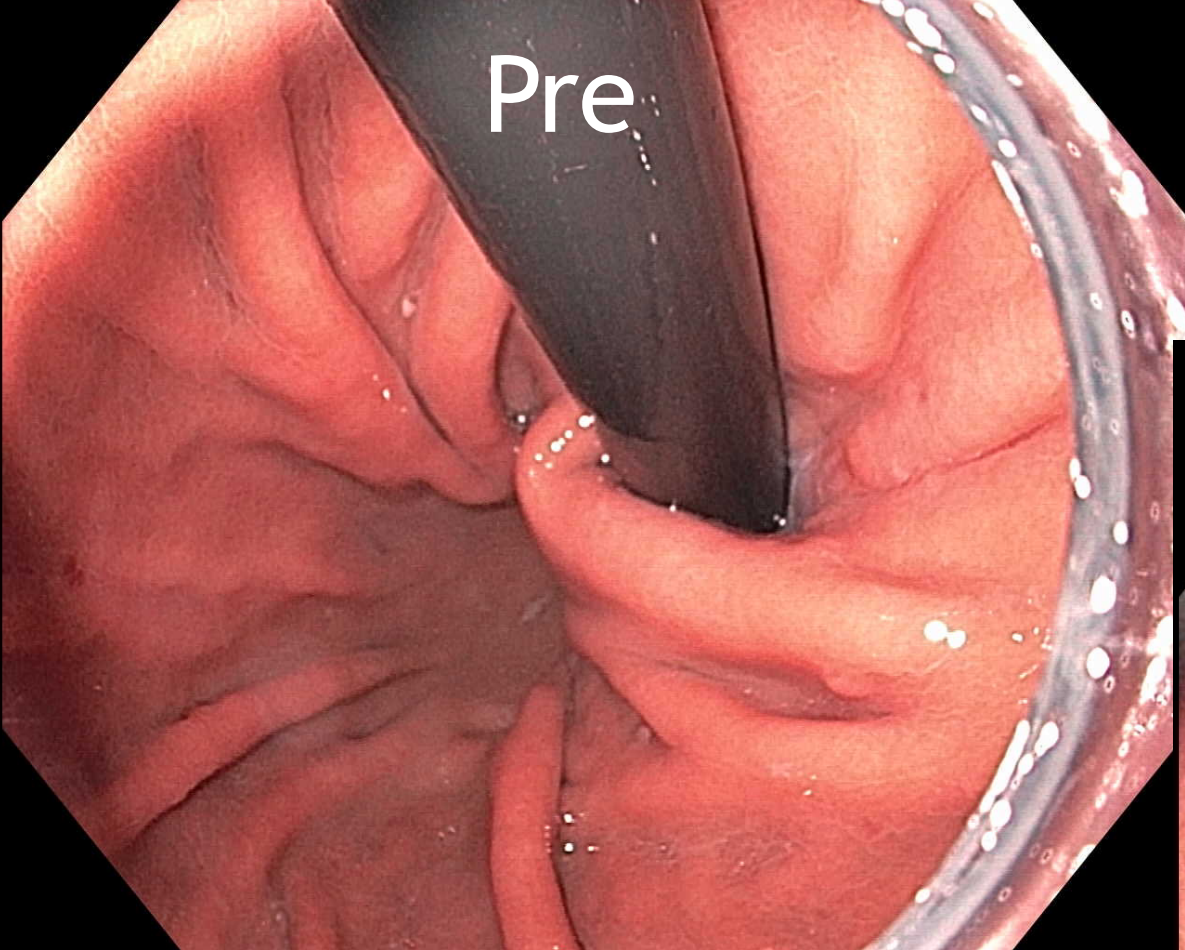




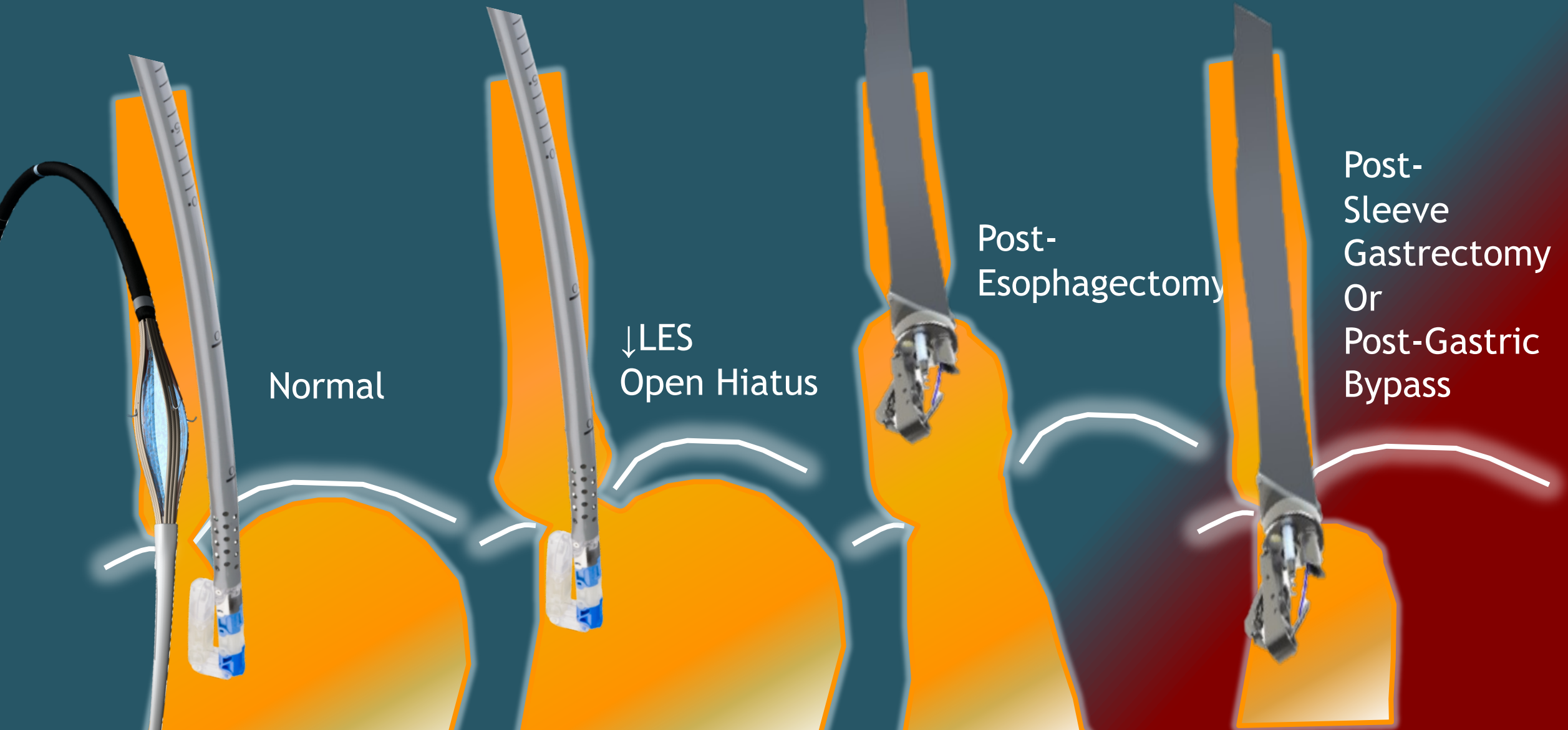
Pre

Stretta

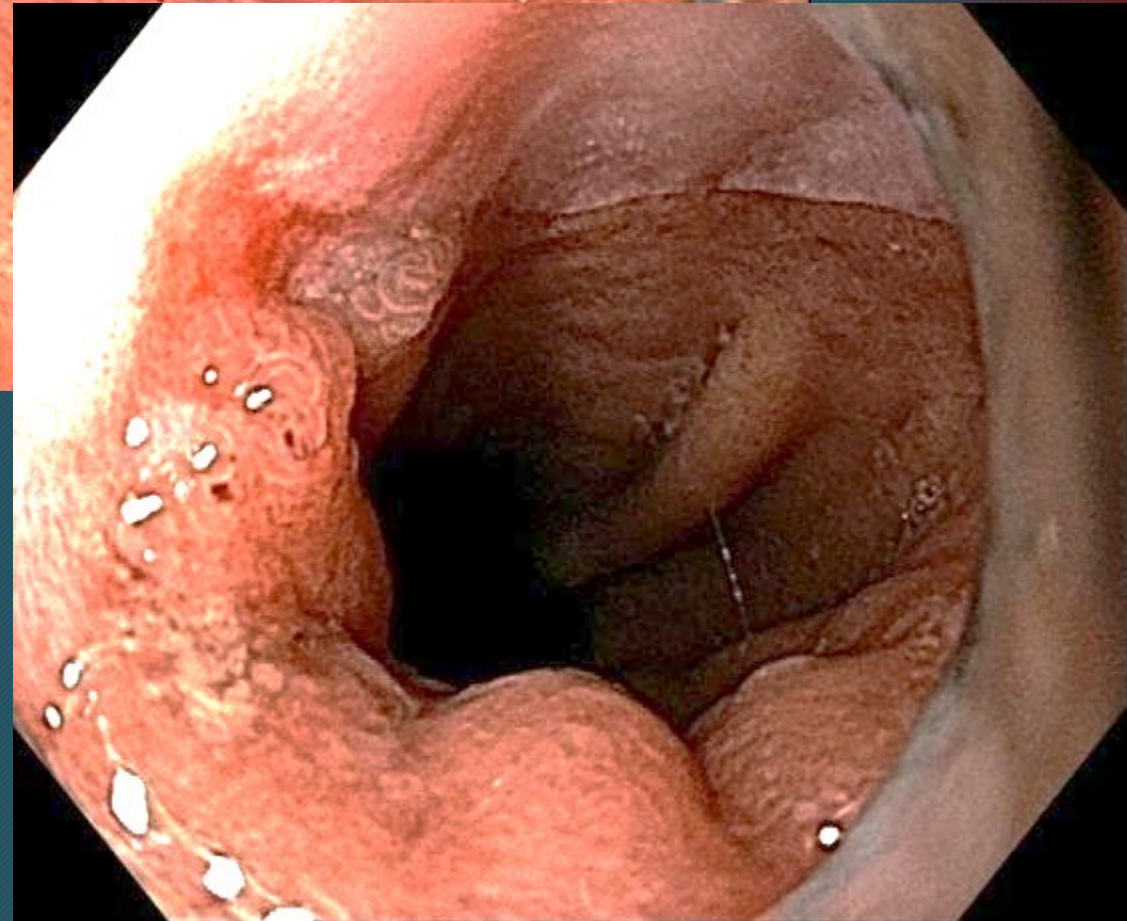
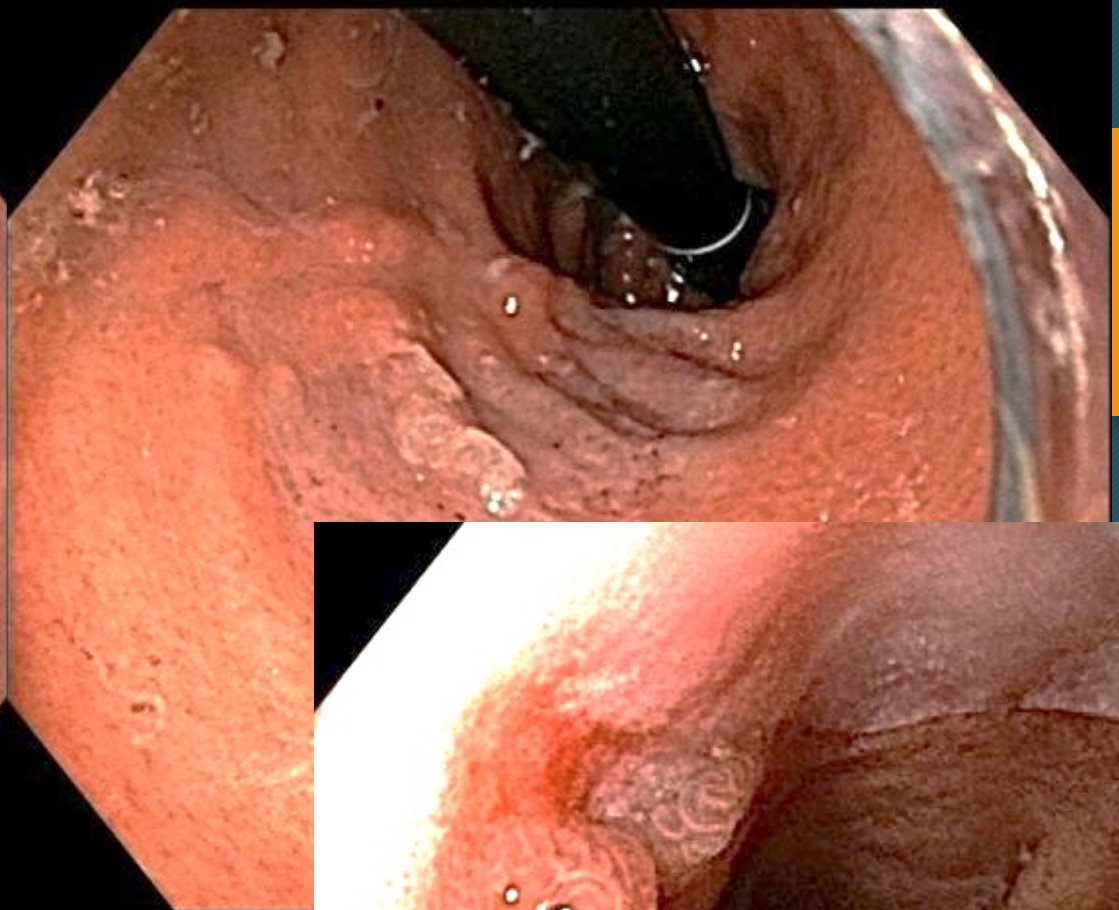
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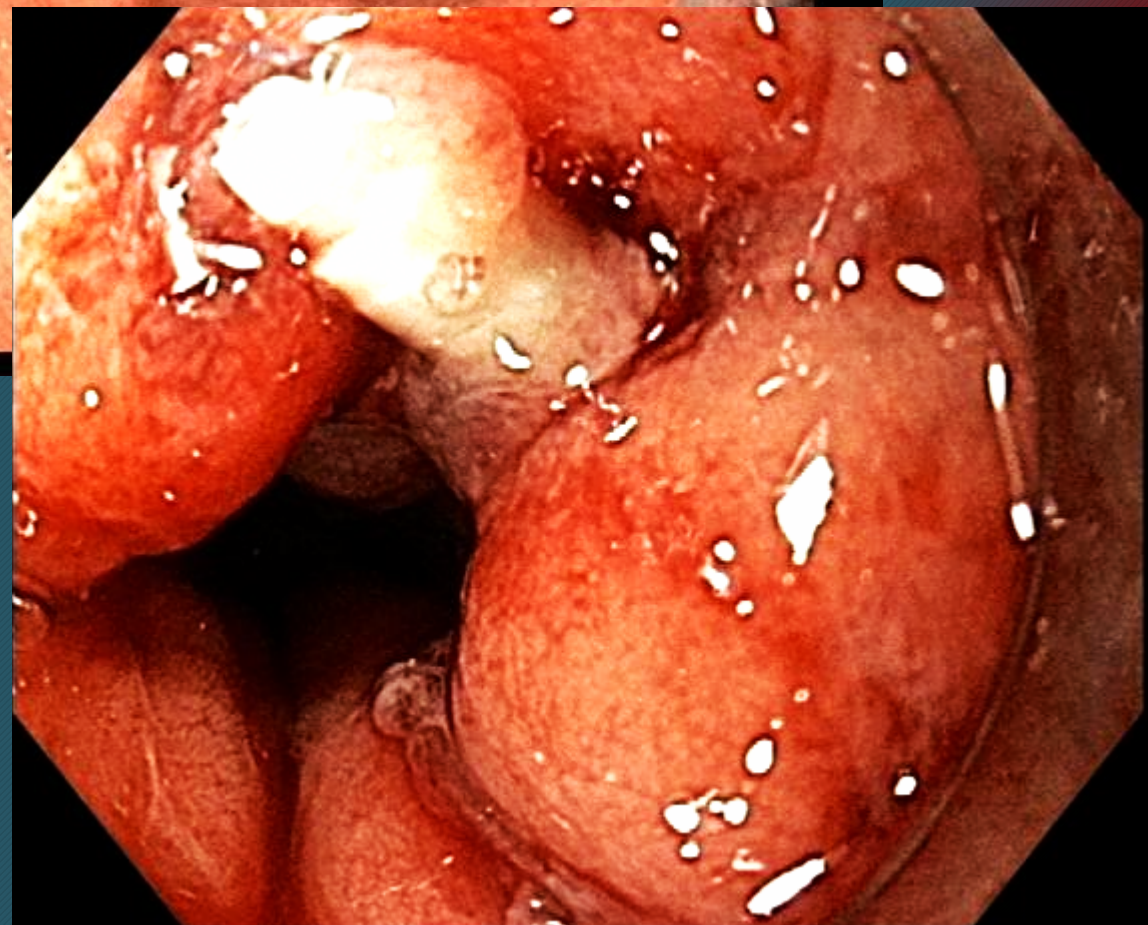
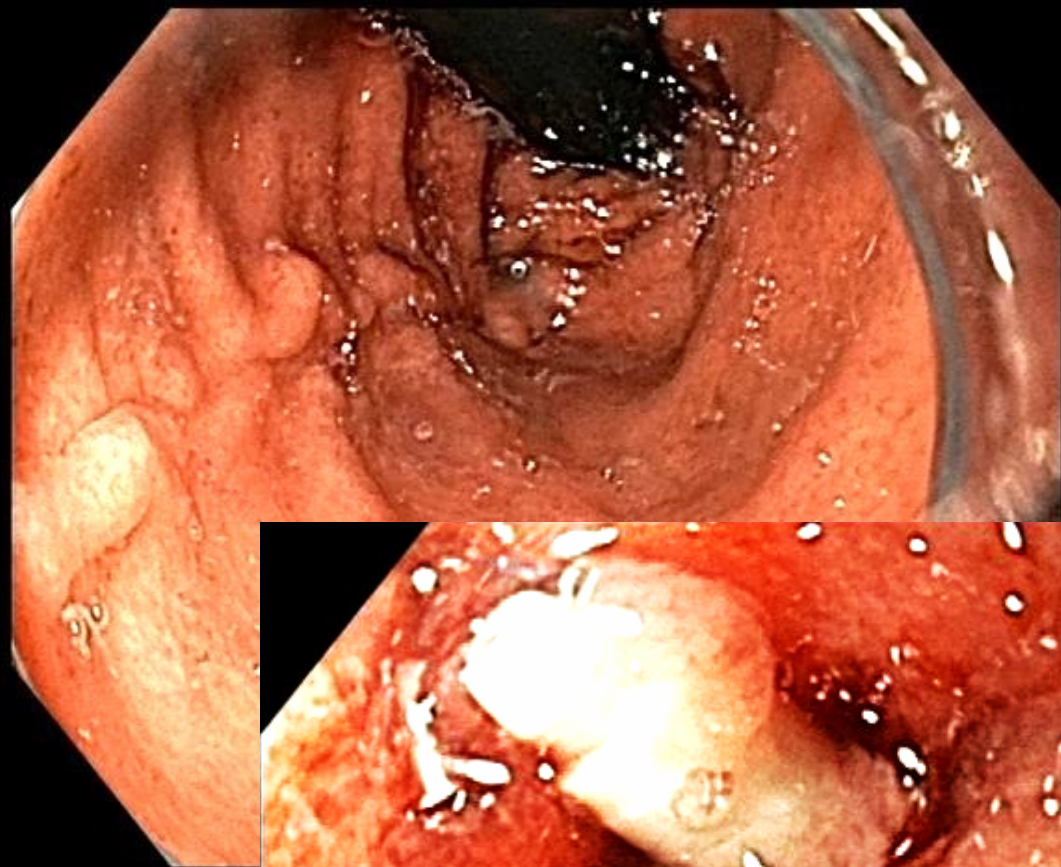
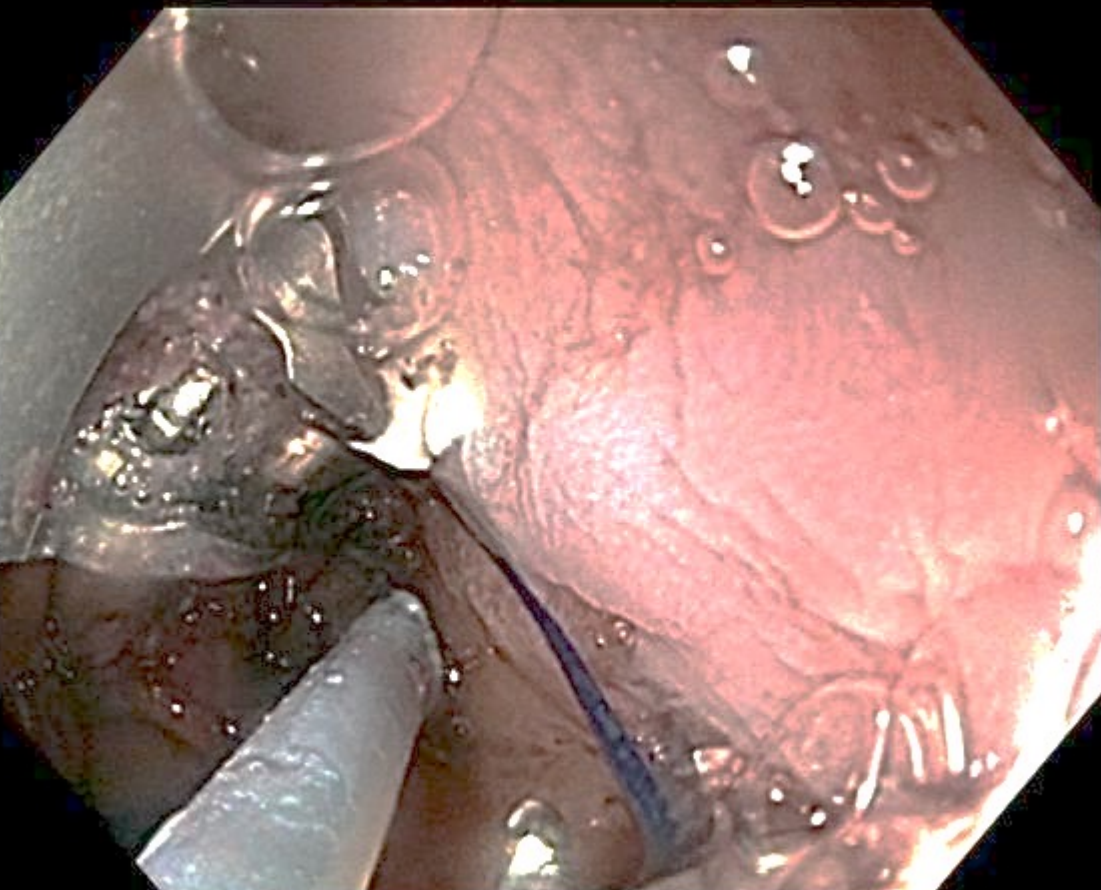


Endoscopic Treatment for GERD



Post Sleeve GERD



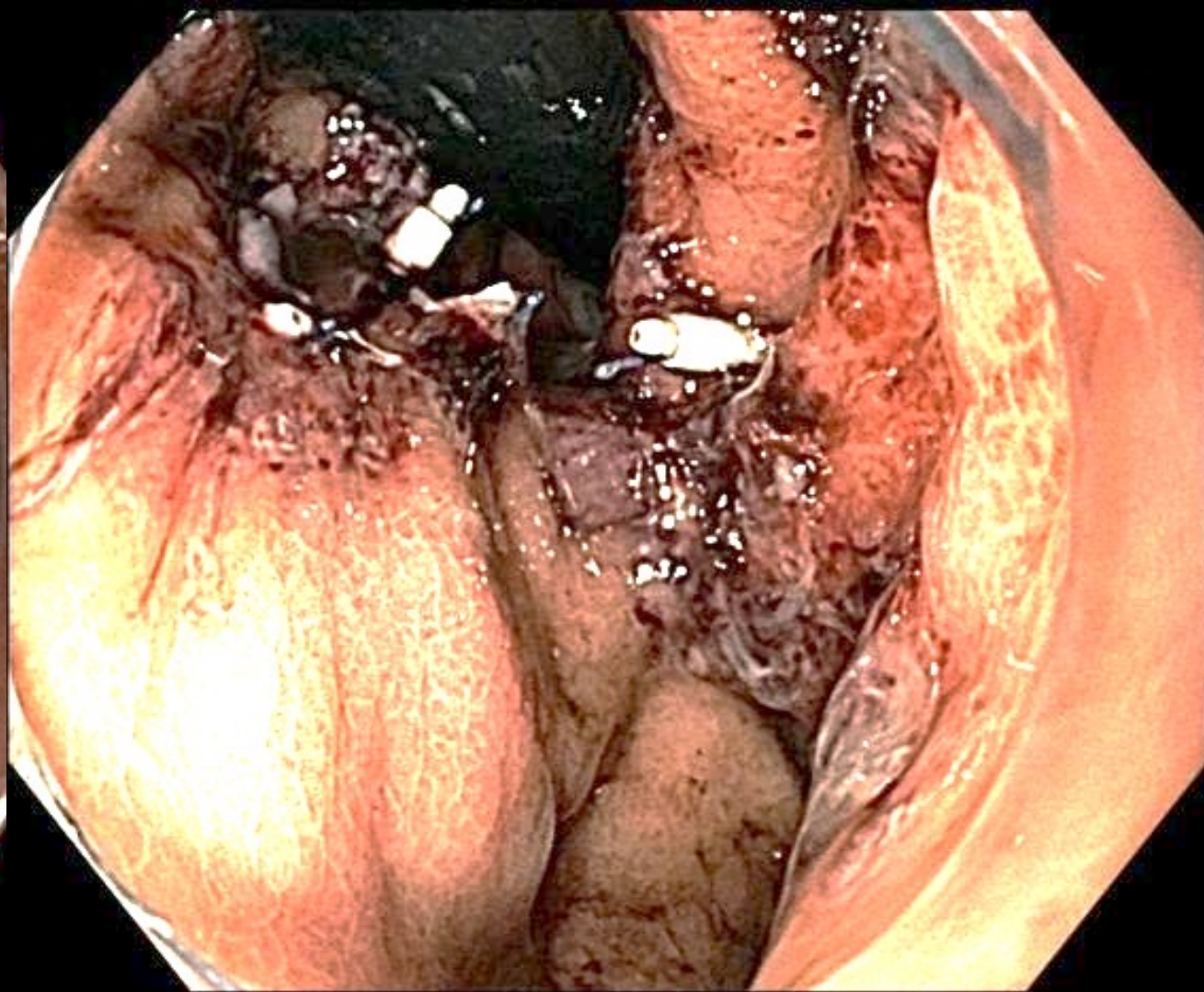
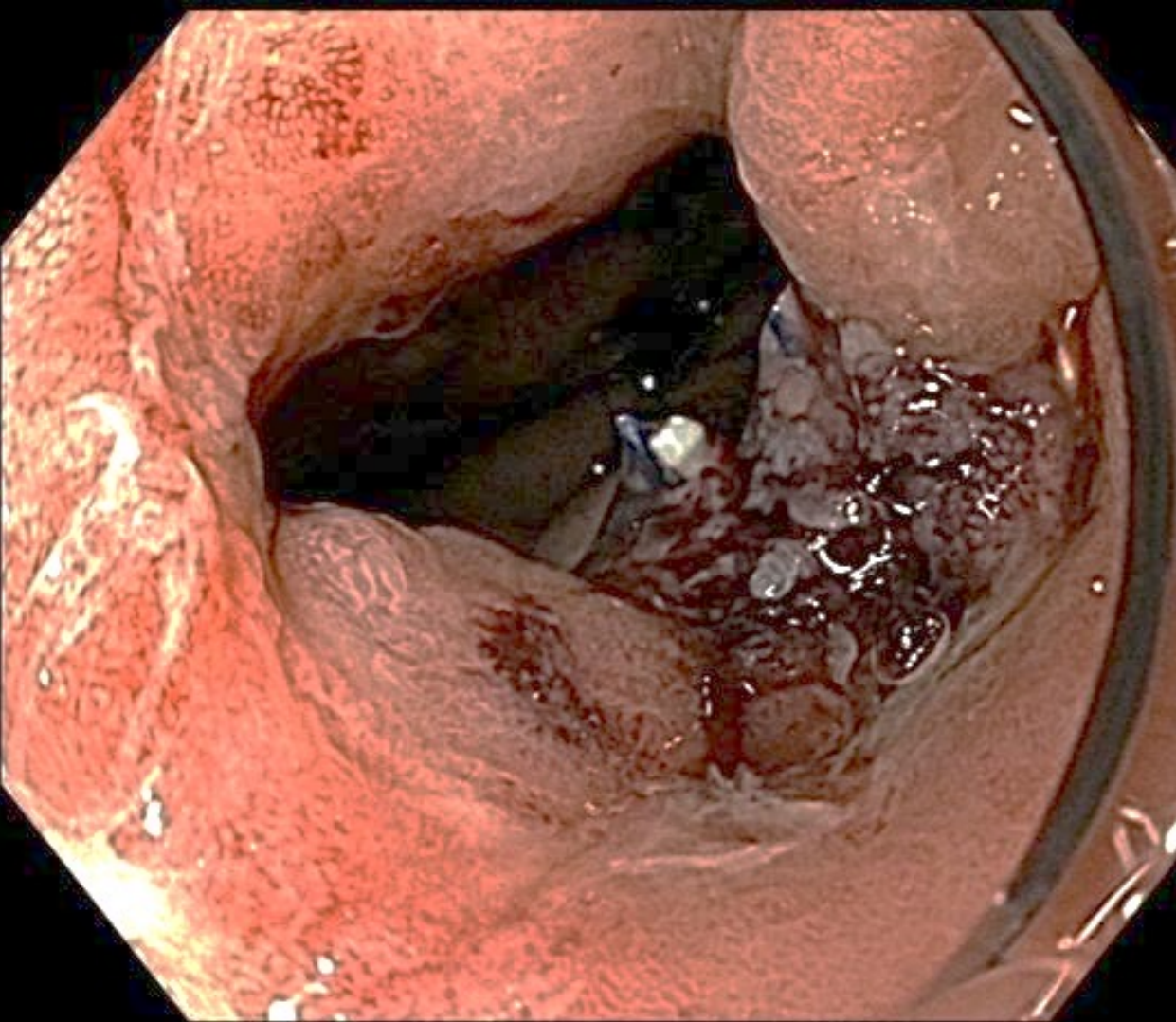


Original article

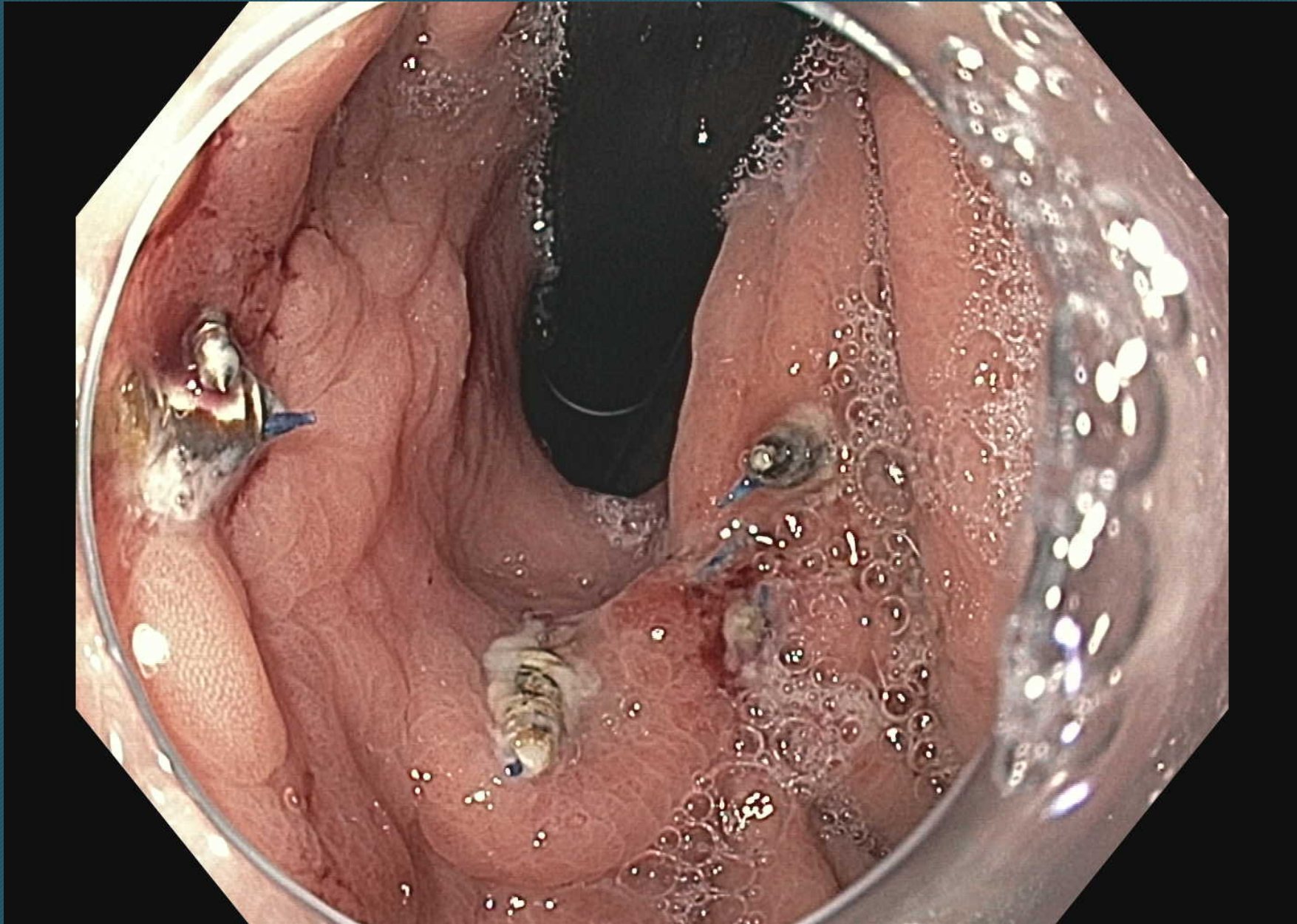
Endoscopic augmentation of gastroesophageal junction using a full-thickness endoscopic suturing device

Han J, Chang KJ et al EIO 2018;6(9):E1120-1125

Post Esophagectomy GERD

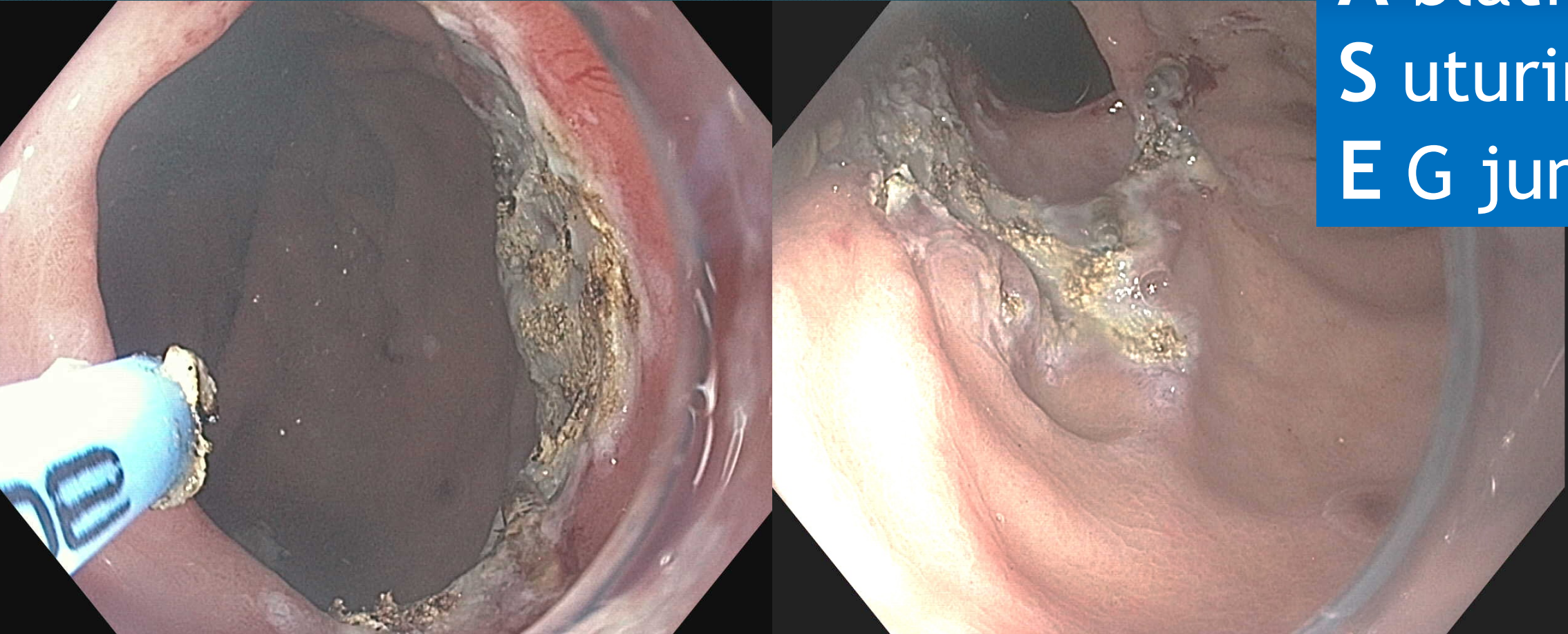


Post Esophagectomy GERD – 5 mo f/u



Post-Esophagectomy GERD

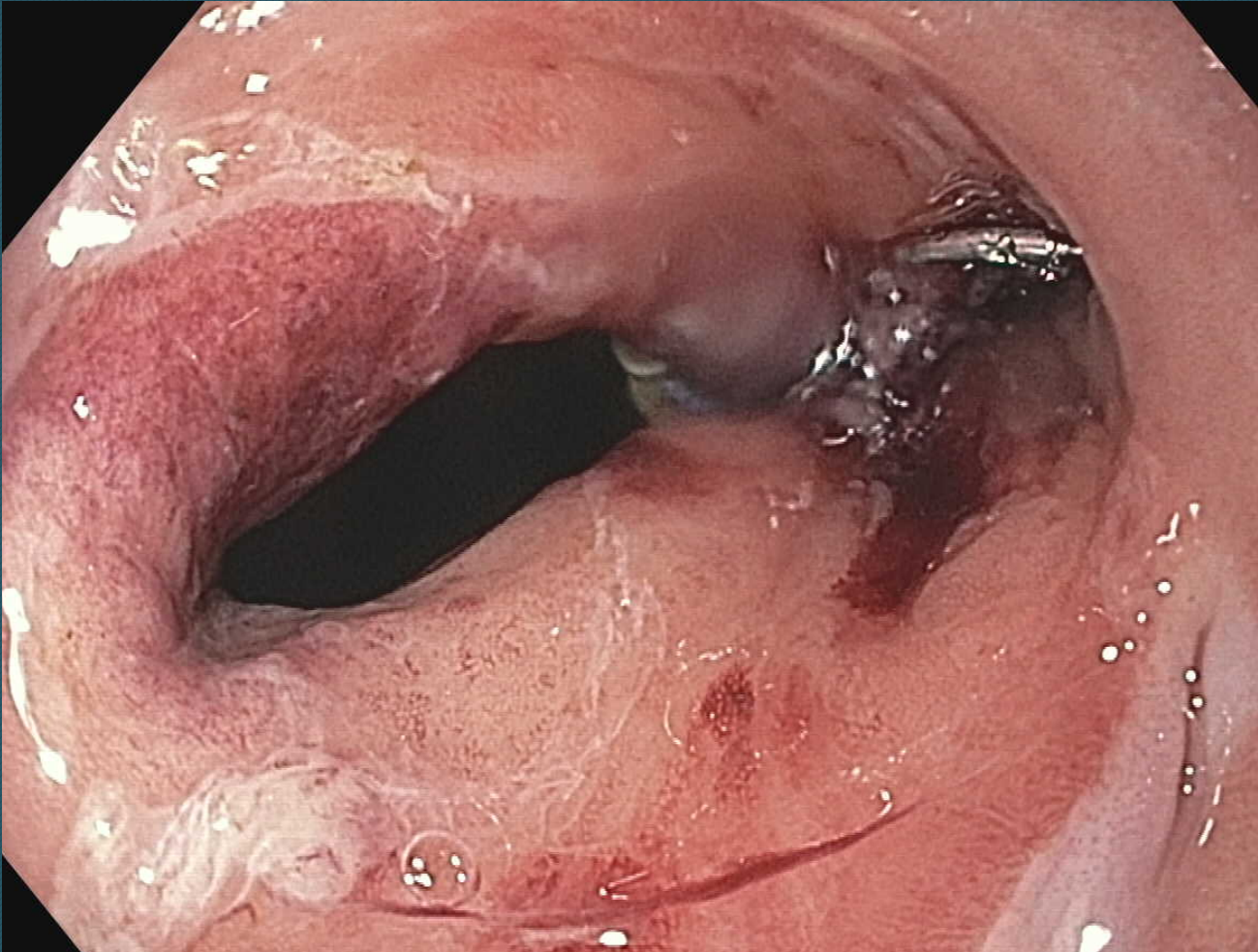
Mucosal
Ablation &
Suturing of
E G junction

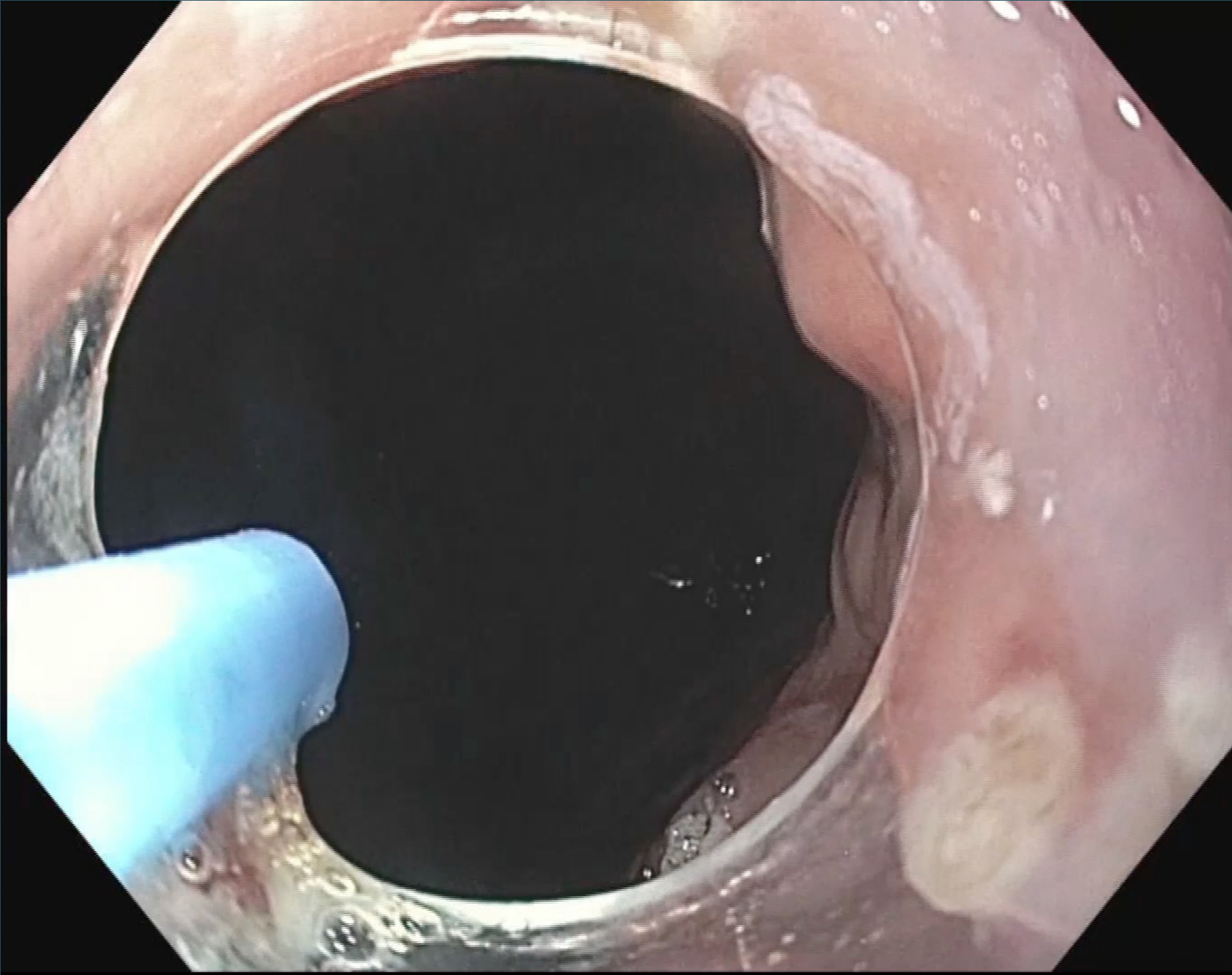


Fortinsky KJ, Chang KJ et al. GIE 2018; 87: AB552.

Post Esophagectomy GERD

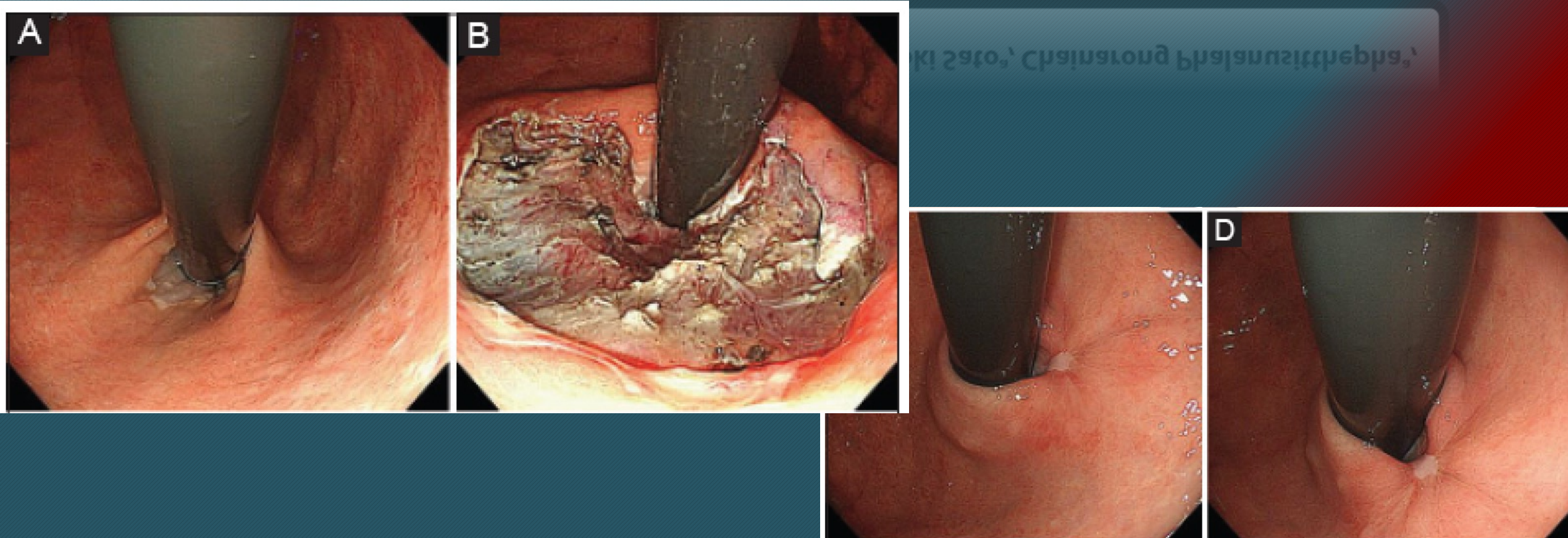
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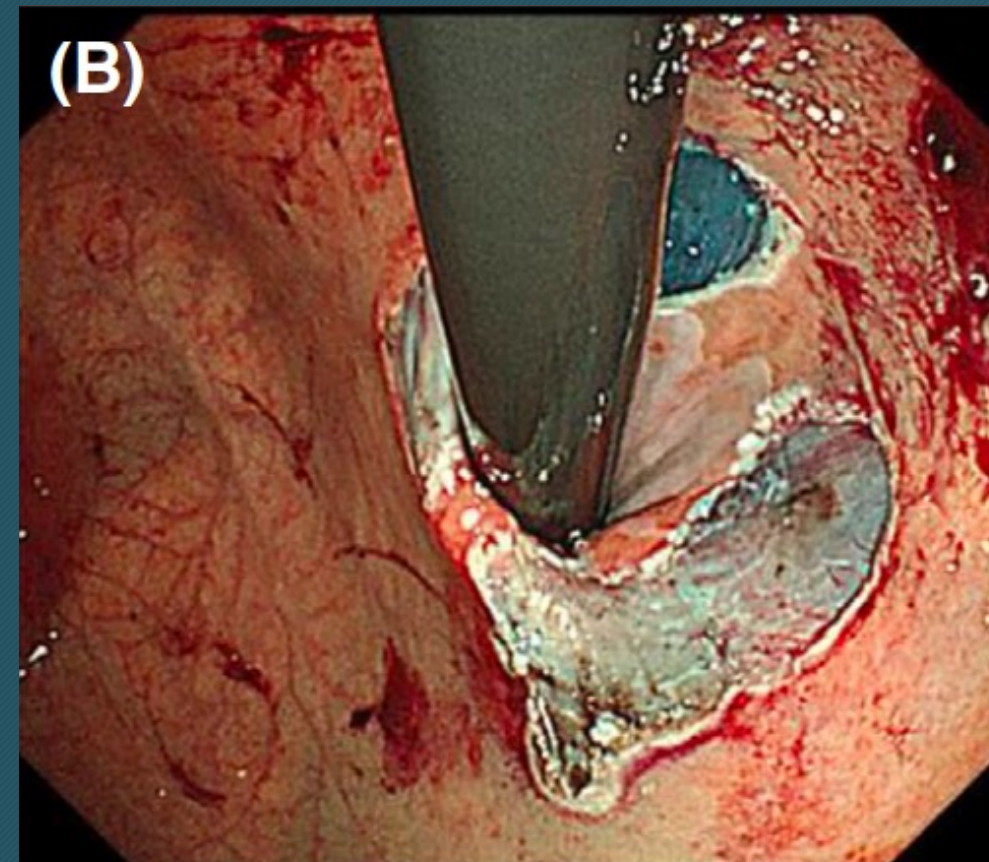
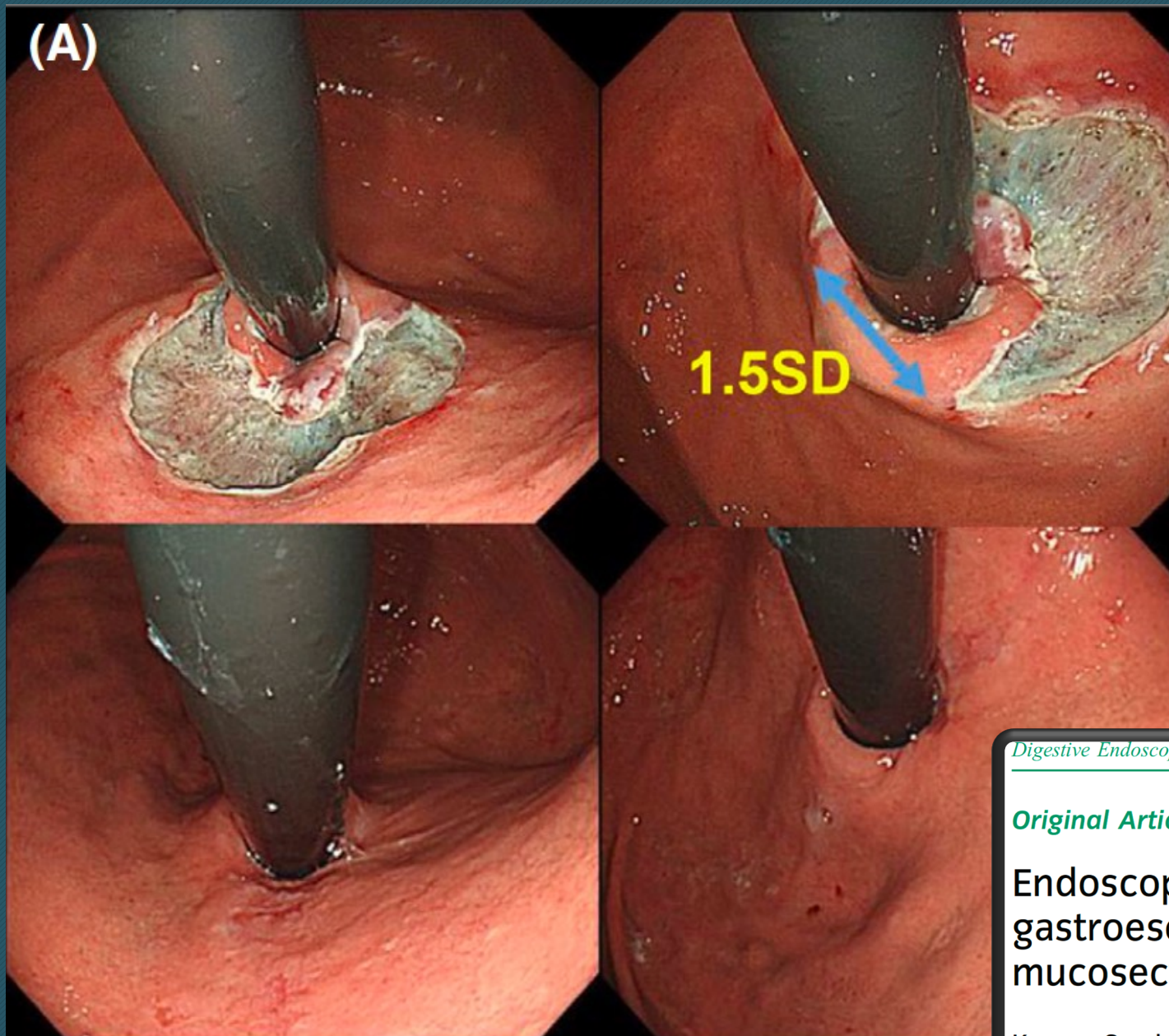




Anti-reflux mucosectomy for gastroesophageal reflux disease in the absence of hiatus hernia: a pilot study

Haruhiro Inoue^a, Hiroaki Ito^a, Haruo Ikeda^a, Chiaki Sato^a, Hiroki Sato^a, Chainarong Phalanusitthepha^a, Bu'Hussain Hayee^b, Nikolas Eleftheriadis^a, Shin-ei Kudo^c





Digestive Endoscopy 2021; 33: 347–354

doi: 10.1111/den.13727

Original Article

Endoscopic treatment of proton pump inhibitor-refractory gastroesophageal reflux disease with anti-reflux mucosectomy: Experience of 109 cases

Kazuya Sumi,  Haruhiro Inoue, Yasutoshi Kobayashi, Yugo Iwaya, 
Mary Raina Angeli Abad,  Yusuke Fujiyoshi,  Yuto Shimamura, 
Haruo Ikeda and Manabu Onimaru

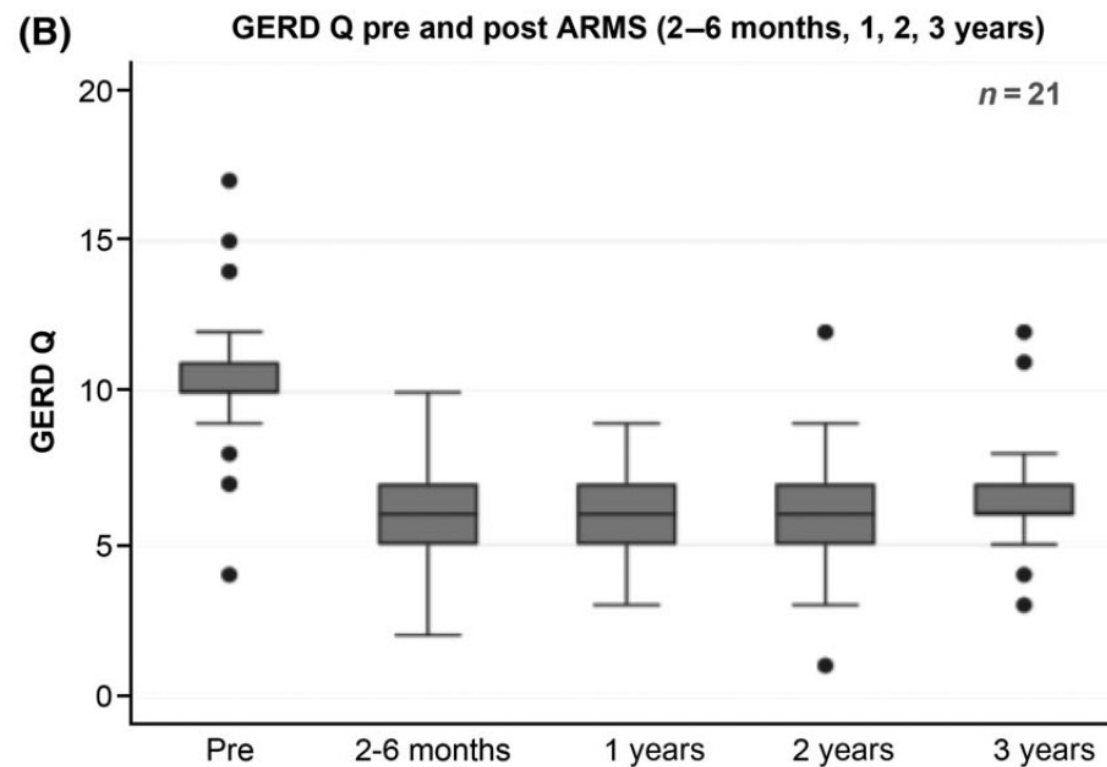
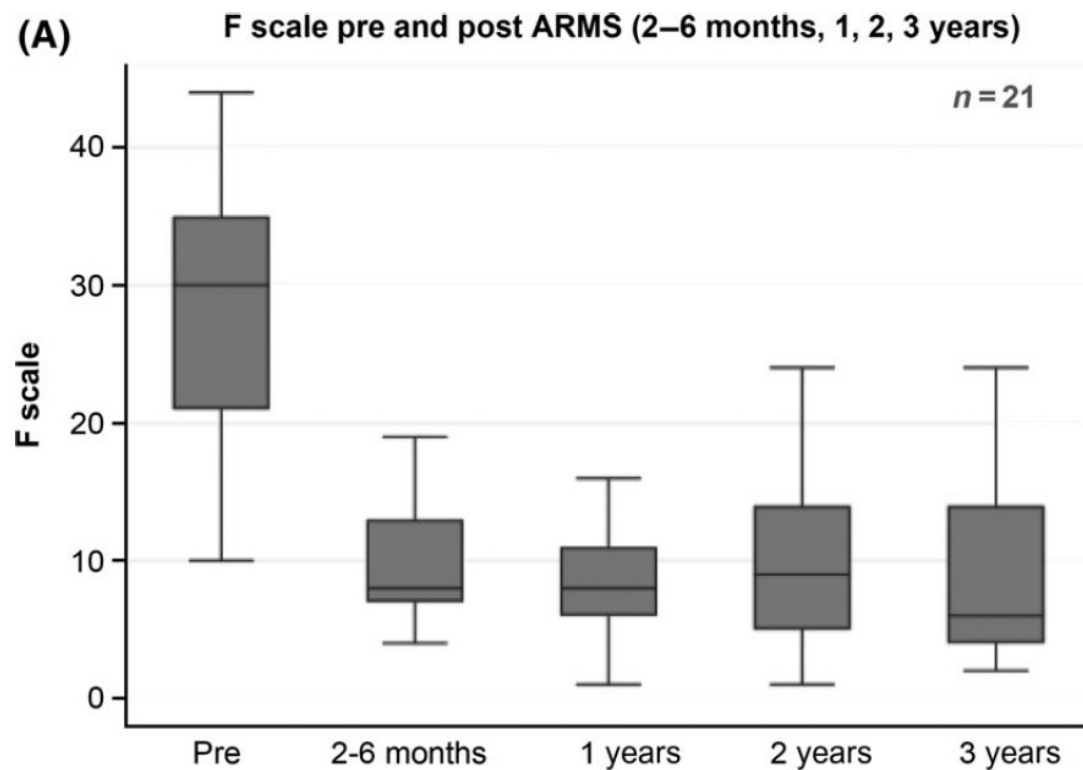


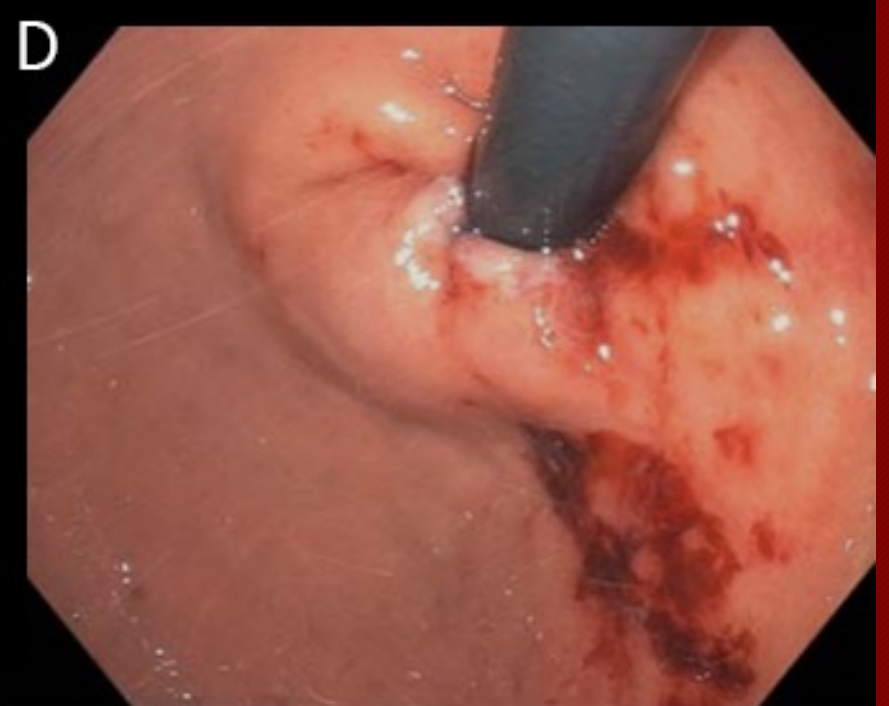
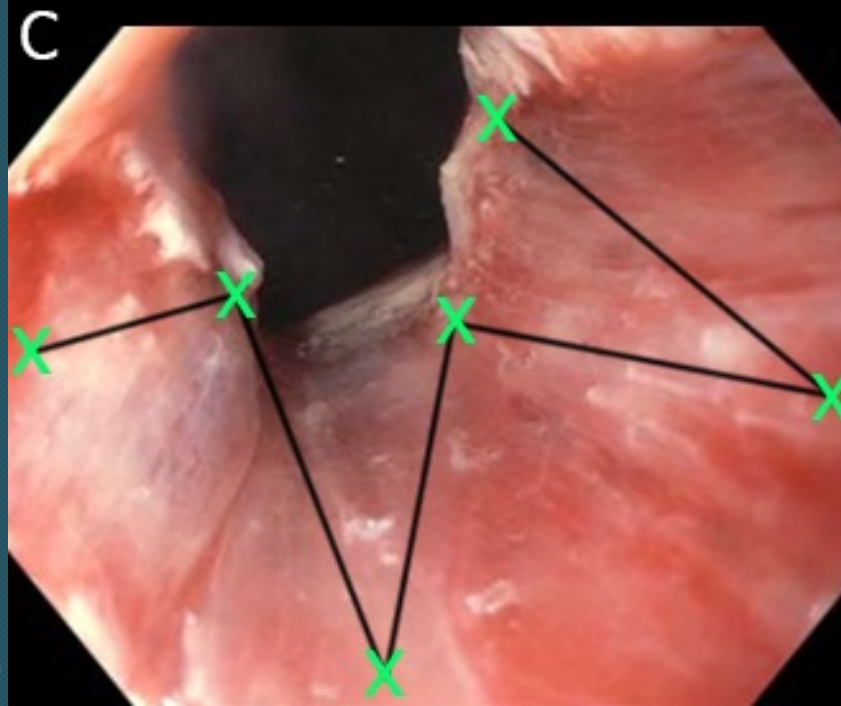
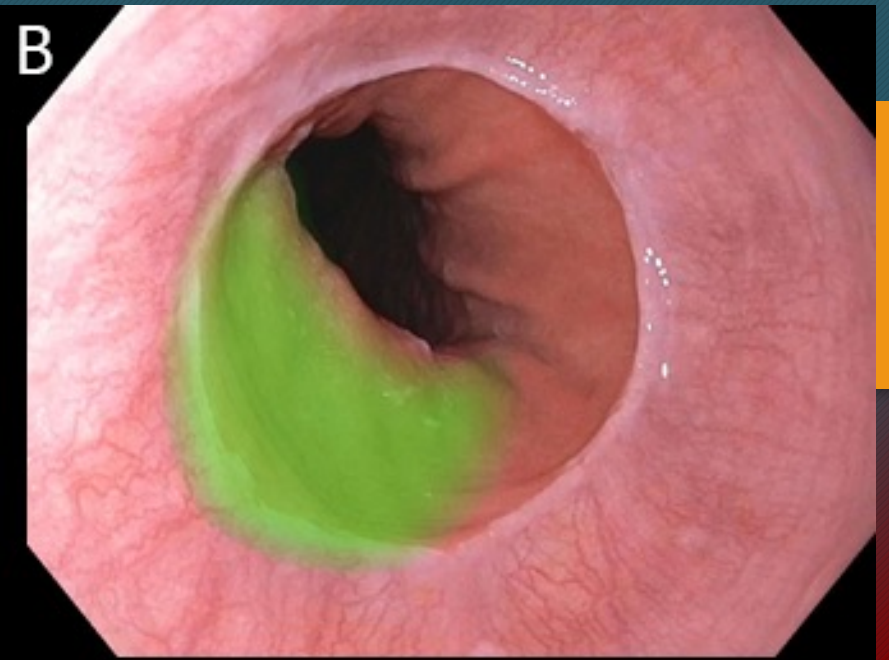
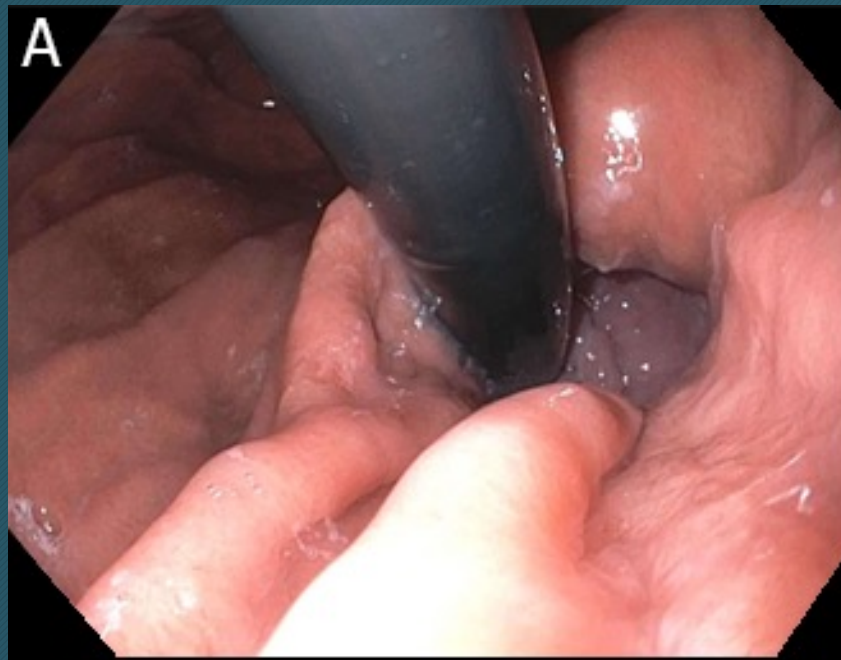
Figure 5 F scale & GerdQ scores (3 years follow up).

Table 3 Characteristics of ESD, EMR-C (original) and EMR-C (butterfly) about ARMS

	ESD <i>n</i> = 7	EMR-C (original) <i>n</i> = 81	EMR-C (butterfly) <i>n</i> = 21
Age, years	58.1 ± 17.9	52.9 ± 15.8	57.1 ± 14.9
Gender (male), <i>n</i>	4	47	12
Operation time, min	129.7 ± 13.6	56.4 ± 24.5	38.5 ± 15.3
PPI off rates (2–6 months later)	50% (2/4) [†]	40% (30/75) [‡]	48% (10/21)
Transient stenosis	0	12 (15%)	1
Adverse events	None	Two cases of post-operative hemorrhage	One case of minor perforation

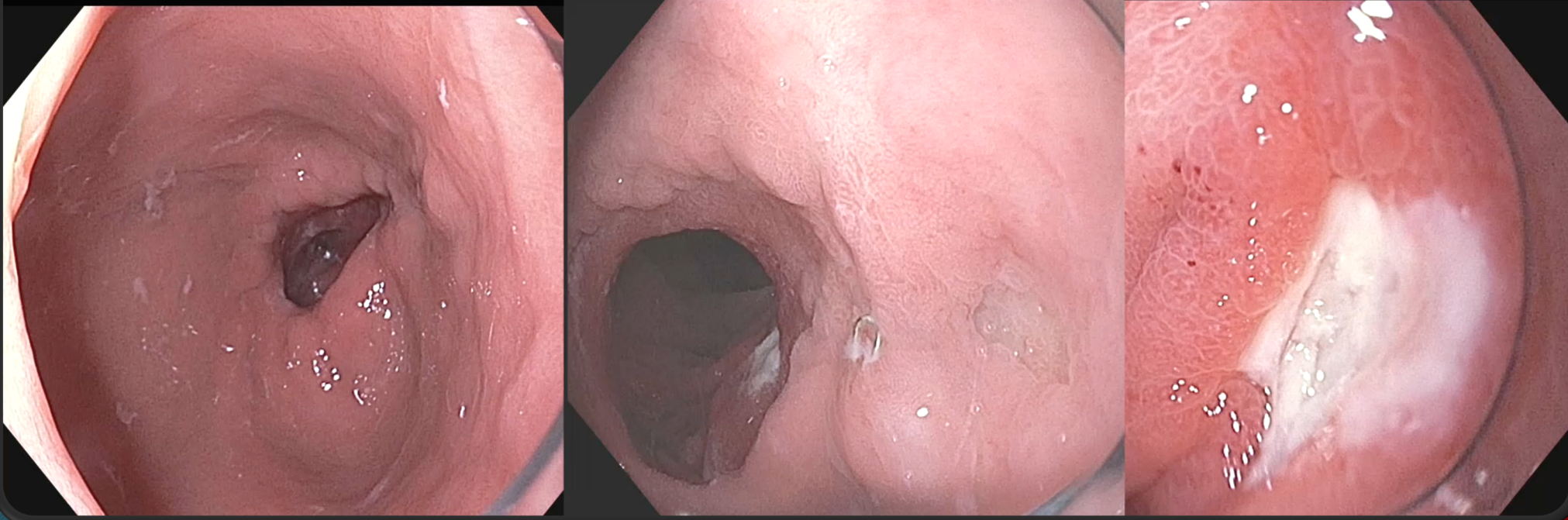
- Repeat EGD in 2-3 weeks on all patients
- 13 of 88 patients (14.4%) required more than 3 dilations

Resection And Plication (RAP)



Resection And Plication

48 F Morbid Obesity, RY-Gastric Bypass 1998
lost 135 lbs, recent 60lb wt gain, GERD sx
EGD: Open G-J Anastomosis, Jejunal ulcer



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