

top ten

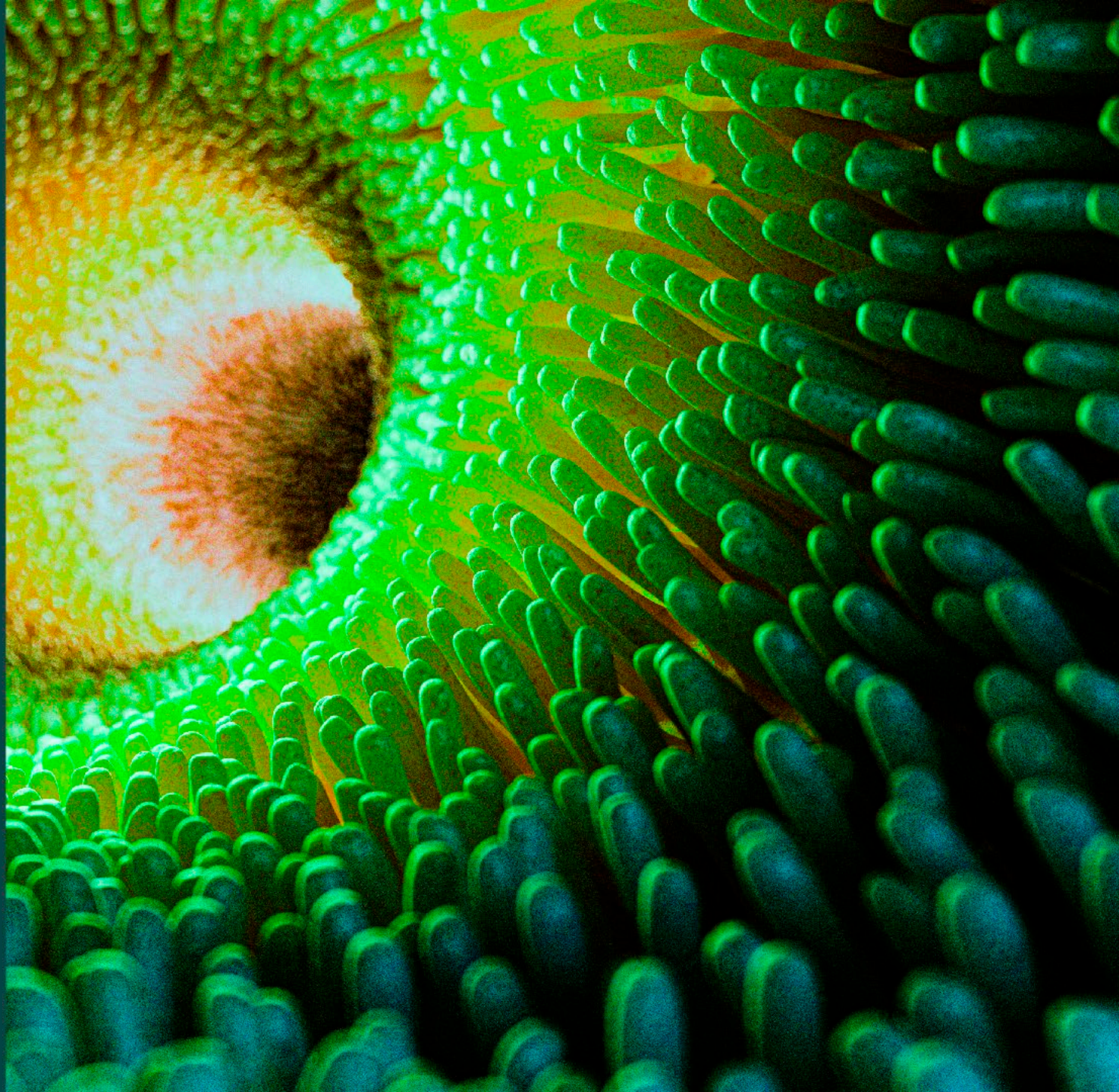
in gastroenterologia

14[^] EDIZIONE

24-25 NOVEMBRE 2023

BERGAMO

HOTEL EXCELSIOR SAN MARCO
Piazza della Repubblica, 6





Fondazione IRCCS
Policlinico San Matteo

Sistema Socio Sanitario



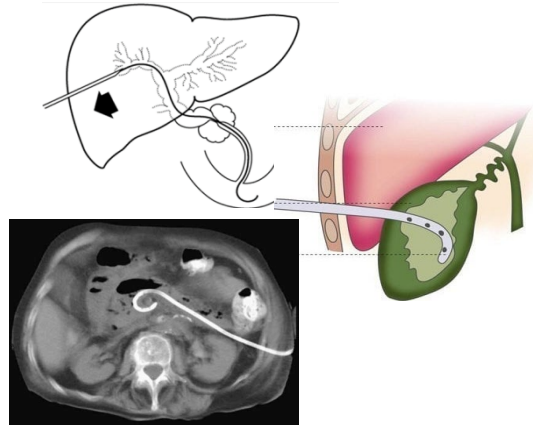
Regione
Lombardia

Novità in endoscopia operativa

Dott. Andrea Anderloni, MD, PhD

Gastroenterologia ed Endoscopia Digestiva
Fondazione IRCCS Policlinico San Matteo, Pavia

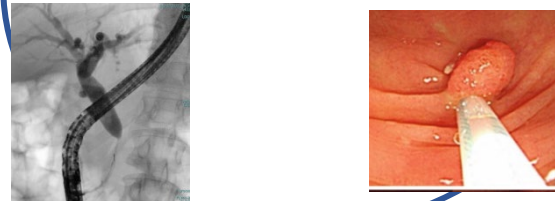
Interventional Radiology



Surgery



Operative Endoscopy



STRUMENTI

ACCESSORI

**Endoscopy
R**evolution


INDICAZIONI

1



2012

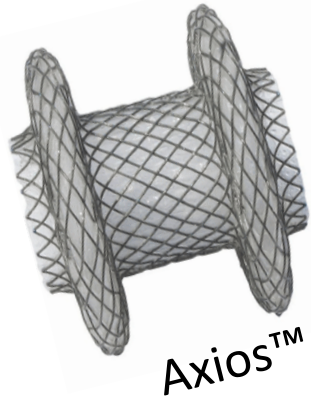
LUMEN APPOSING METAL STENT

Clinical evaluation of a novel lumen-apposing metal stent for endosonography-guided pancreatic pseudocyst and gallbladder drainage (with videos) 

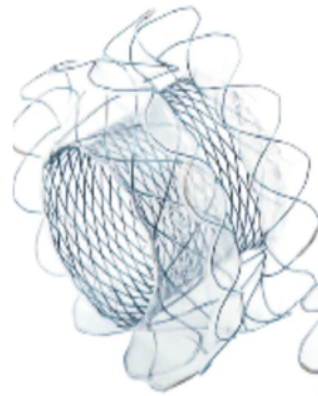
Takao Itoi, MD,¹ Kenneth F. Binmoeller, MD,² Janak Shah, MD,² Atsushi Sofuni, MD,¹ Fumihide Itokawa, MD,¹ Toshio Kurihara, MD,¹ Takayoshi Tsuchiya, MD,¹ Kentaro Ishii, MD,¹ Shujiro Tsuji, MD,¹ Nobuhito Ikeuchi, MD,¹ Fuminori Moriyasu, MD¹

Tokyo, Japan

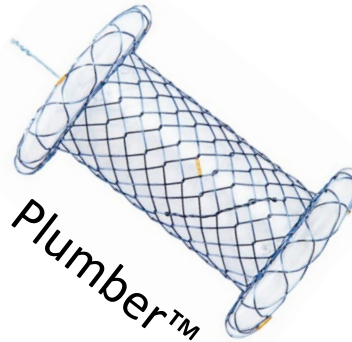
870 GASTROINTESTINAL ENDOSCOPY Volume 75, No. 4 : 2012



Axios™

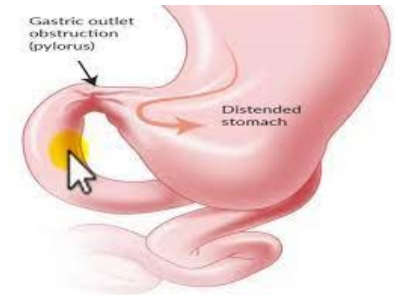
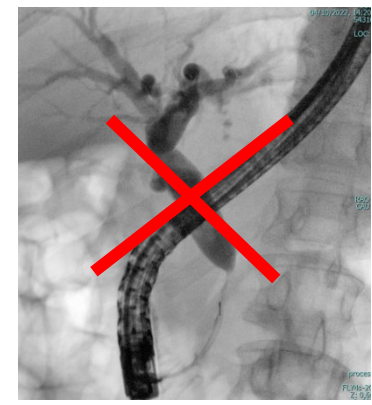
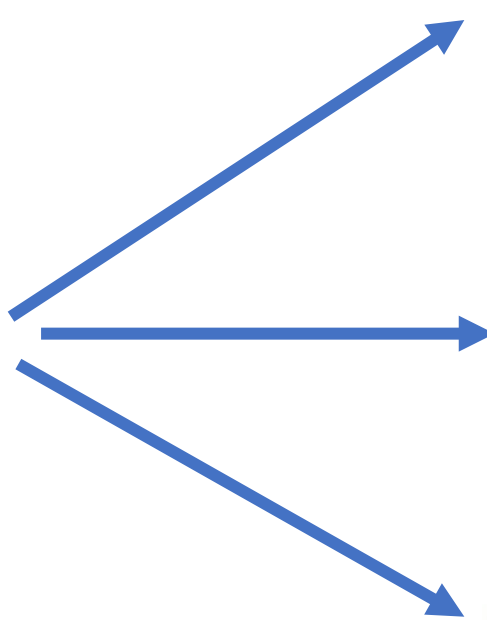
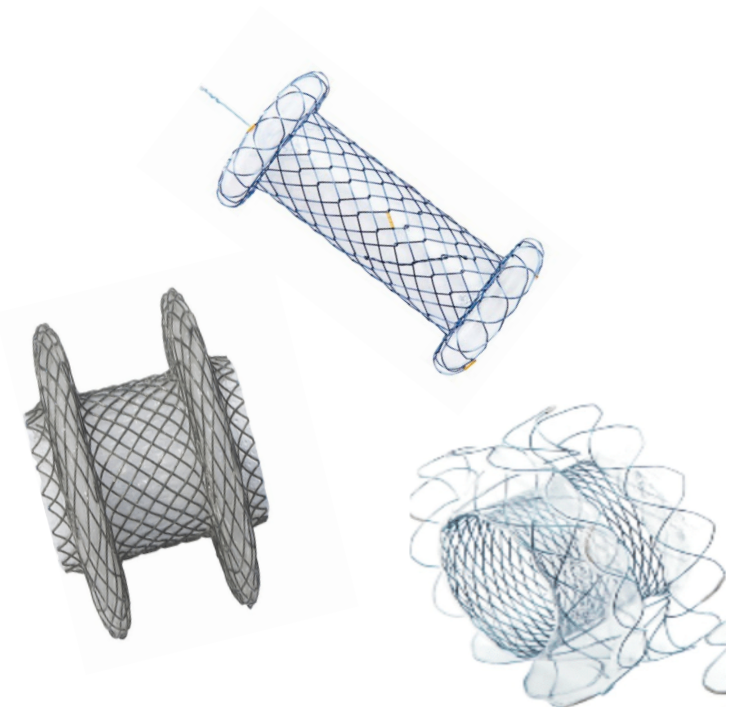


Spaxus™



Plumber™

Make difficult things easier
Allow me to do “NEW” things



From novel devices..... to novel indications

2

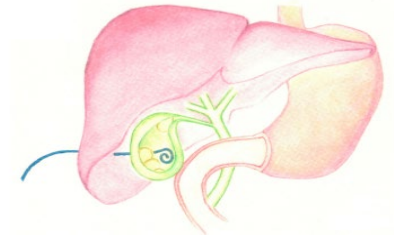


THE FRAIL PATIENT AT THE CENTER OF TREATMENT

From past... to now....!



**EUS-guided
GBD**



**Percutaneous
Transhepatic GBD**

Meta-analysis including 5
comparative studies
206 EUS-GBD and 289
Percutaneous-GBD

- Similar technical success (OR 0.43; 0.12-1.58)
- Similar clinical success (OR 1.07; 0.36-3-16)
- **EUS-GBD reduces AEs (OR 0.43; 0.18-1.00)**
- **EUS-GBD reduces Hospital stay, reinterventions and readmissions**

(Luk SW, et al. Endoscopy. 2019 Aug;51(8):722-732)

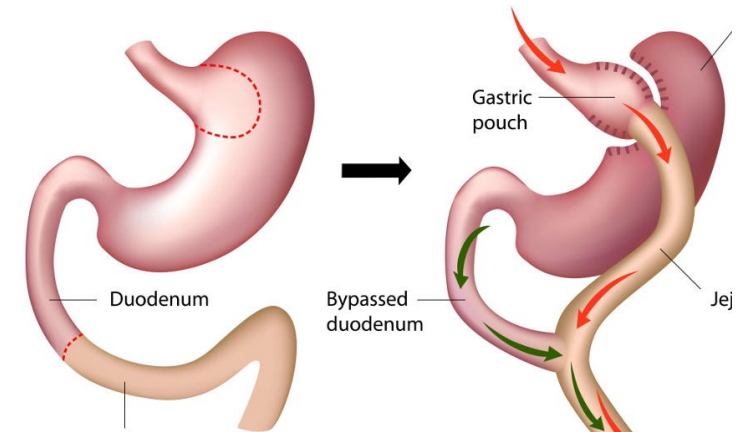
Failed biliary cannulation

- In reachable papilla (< 5% of cases)
- In non-reachable papilla
 - Duodenal stricture
 - Altered anatomy



Complex cases

- Hilar strictures



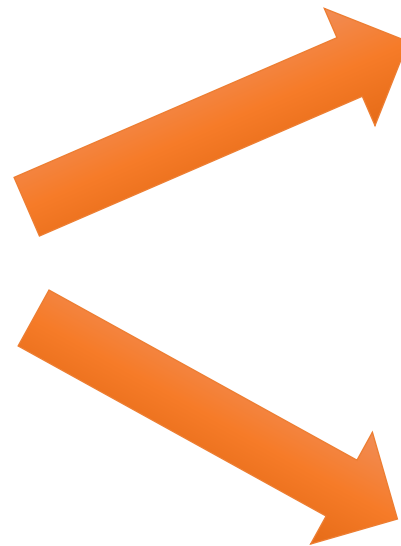
Fai...
ERCP

- In re... (5% of cases)

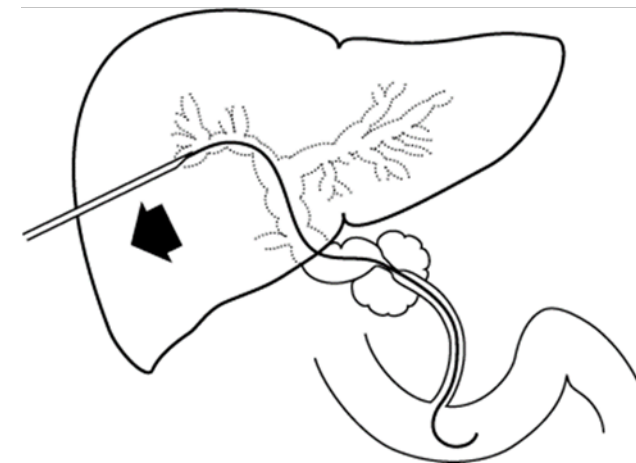


- H... strictures
- Cholecystitis in fragile patient

Previously...



PTBD



SURGERY



PTBD

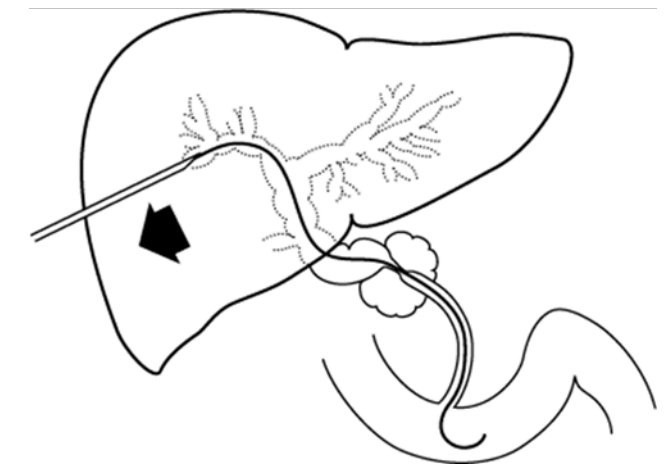
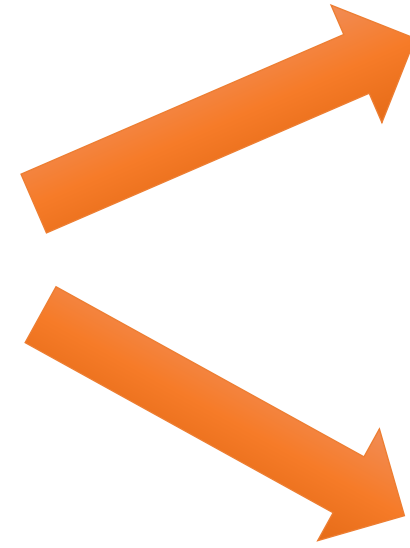
Previously...

ERCP

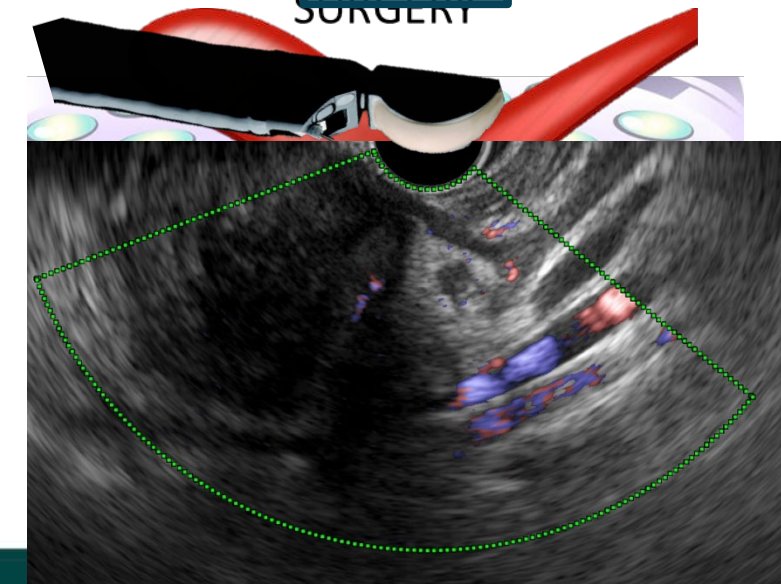


Failure of...
• In re... (5% of cases)

- H... strictures
- Cholecystitis in fragile patient



EUS
SURGERY

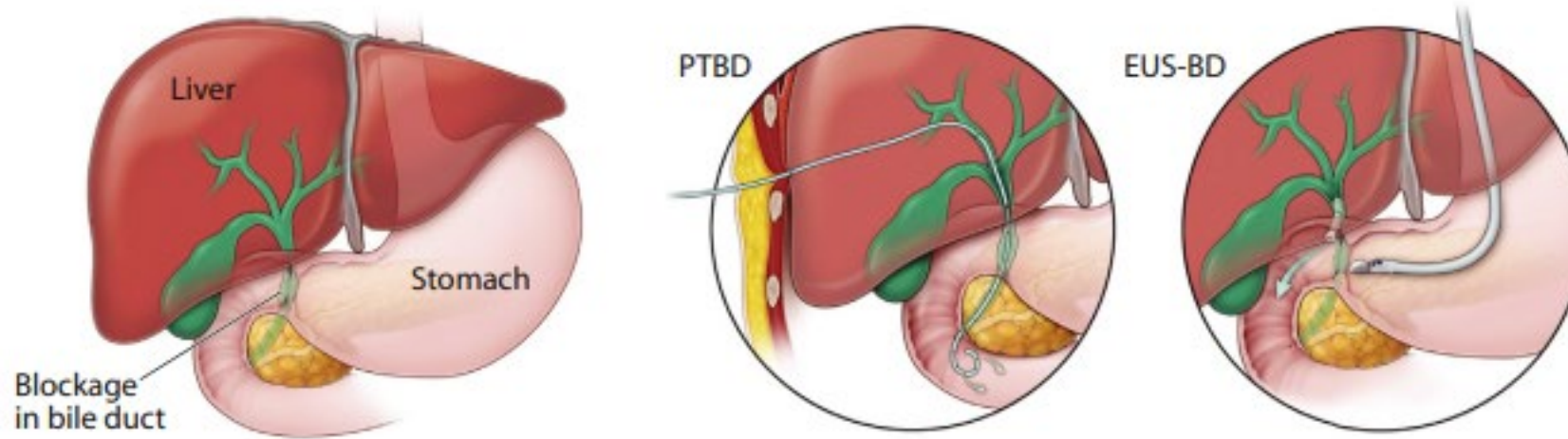


Efficacy and safety of EUS-guided biliary drainage in comparison with percutaneous biliary drainage when ERCP fails: a systematic review and meta-analysis



Reem Z. Sharaiha, MD, FASGE,¹ Muhammad Ali Khan, MD,² Faisal Kamal, MD,² Amy Tyberg, MD,¹ Claudio R. Tombazzi, MLS,² Bilal Ali, MD,² Claudio Tombazzi, MD,² Michel Kahaleh, MD, FASGE¹

New York, New York; Memphis, Tennessee, USA 904 GASTROINTESTINAL ENDOSCOPY Volume 85, No. 5 : 2017



Meta-analysis of 9 included studies: EUS-BD vs PTBD

Same technical success

Higher clinical success and lower rate AEs for EUS-BD

Gastroenterology  aga

CLINICAL - BILIARY | ARTICLES IN PRESS

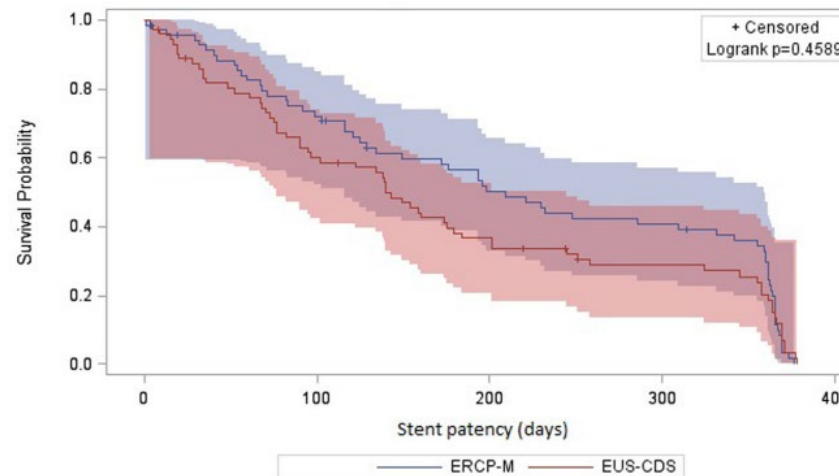
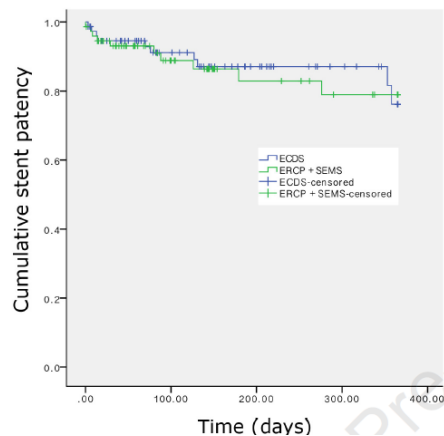
EUS-Guided Choledocho-duodenostomy Using Lumen Apposing Stent Versus ERCP With Covered Metallic Stents in Patients With Unresectable Malignant Distal Biliary Obstruction: A Multicenter Randomized Controlled Trial (DRA-MBO Trial)

Anthony Yuen Bun Teoh • Betrand Napoleon • Rastislav Kunda • ... Kelvin Kwok Chai Ng •

Endoscopic Ultrasound-Guided Biliary Drainage of First Intent With a Lumen-Apposing Metal Stent vs Endoscopic Retrograde Cholangiopancreatography in Malignant Distal Biliary Obstruction: A Multicenter Randomized Controlled Study (ELEMENT Trial)



Yen-I Chen,¹ Anand Sahai,² Gianfranco Donatelli,³ Eric Lam,⁴ Nauzer Forbes,⁵

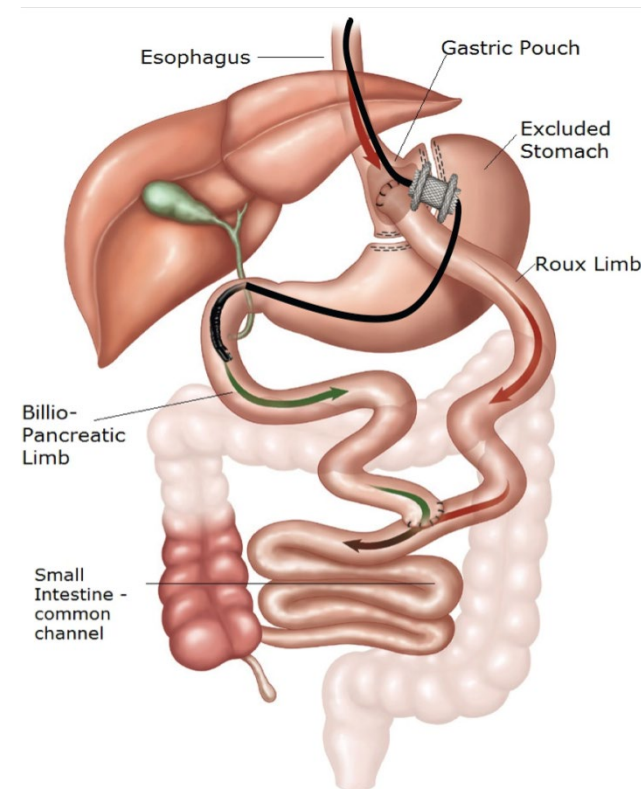
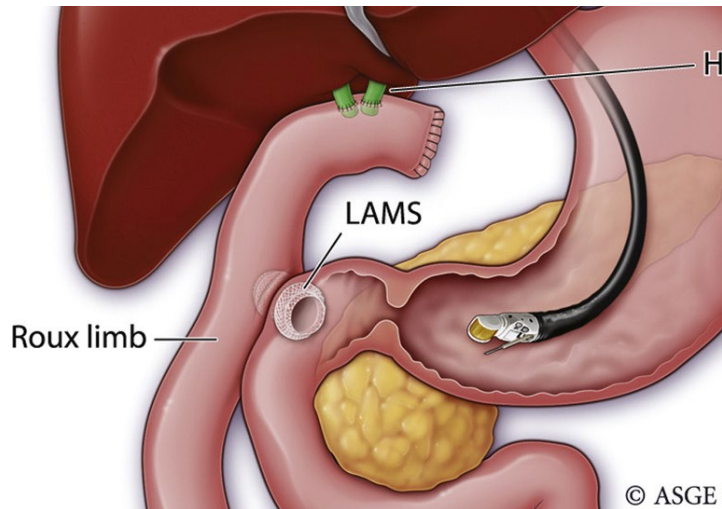


EUS-BD proposed as a first option in resectable and unresectable patients

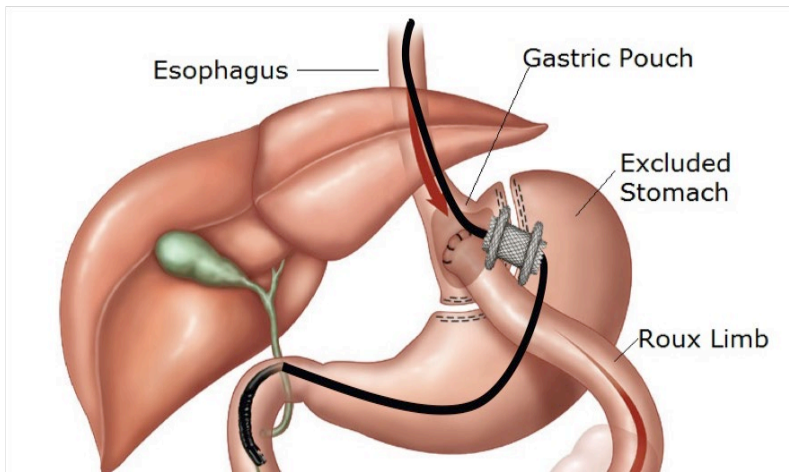
NEW POSSIBLE WAYS



To overcome



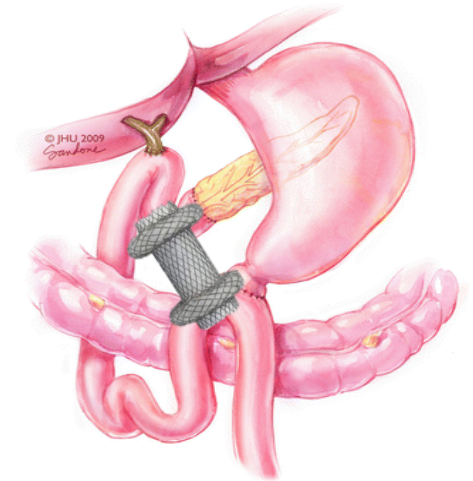
To drive



> [Surg Endosc.](#) 2021 Aug;35(8):4469-4477. doi: 10.1007/s00464-020-07952-3. Epub 2020 Sep 4.

A comparison of clinical outcomes and cost utility among laparoscopy, enteroscopy, and temporary gastric access-assisted ERCP in patients with Roux-en-Y gastric bypass anatomy

- **Similar technical success**
- **Reduce time of hospitalization**
- **Reduced number of recurrence**

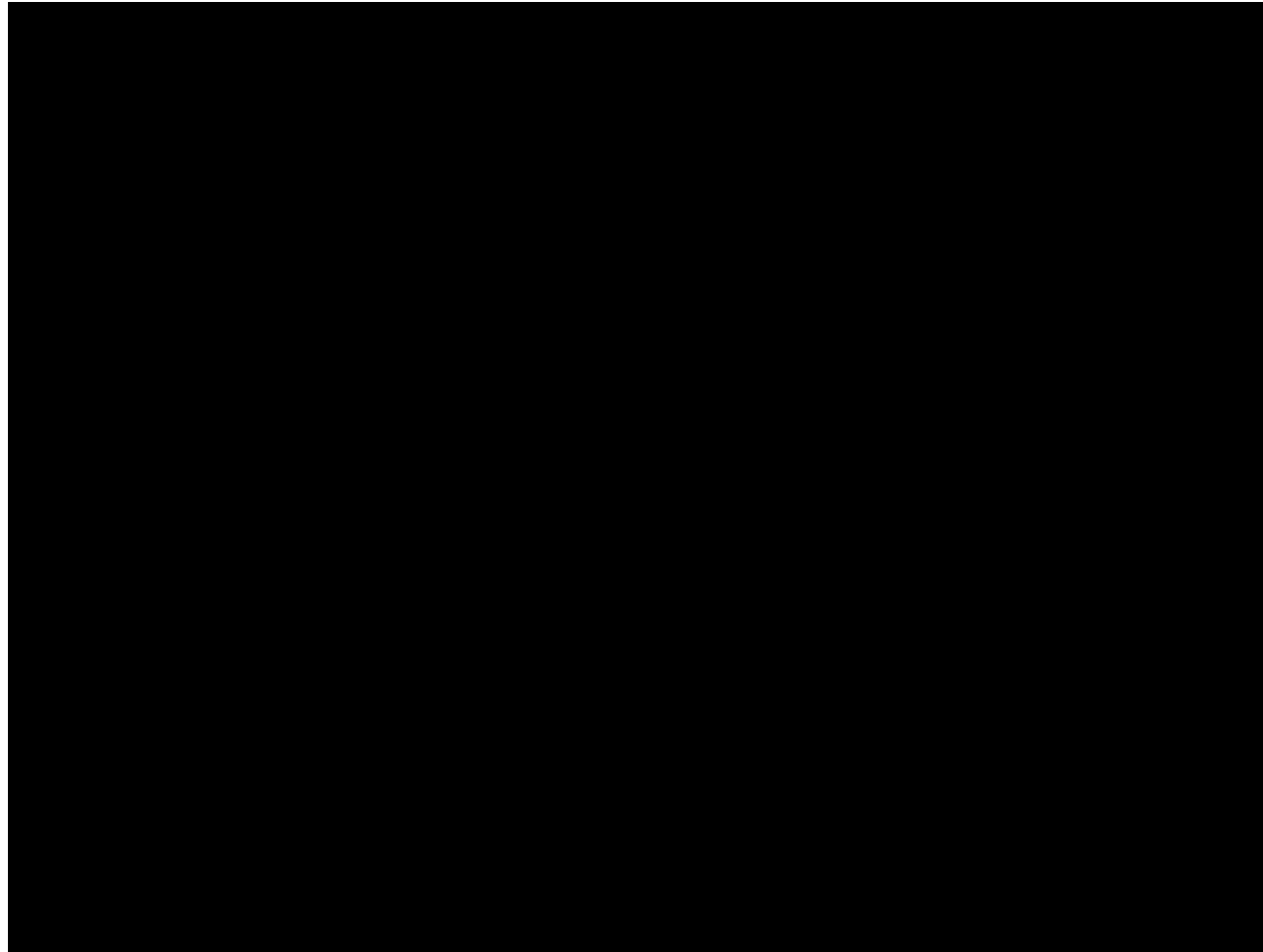


> [Gastrointest Endosc.](#) 2020 May;91(5):1188-1194.e2. doi: 10.1016/j.gie.2019.12.043. Epub 2020 Jan 7.

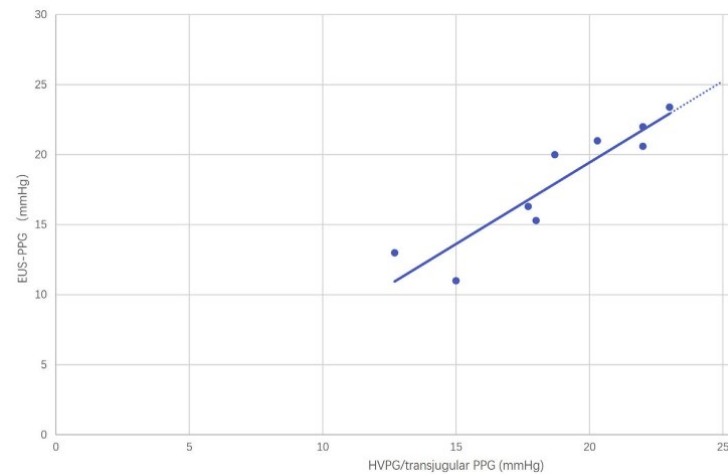
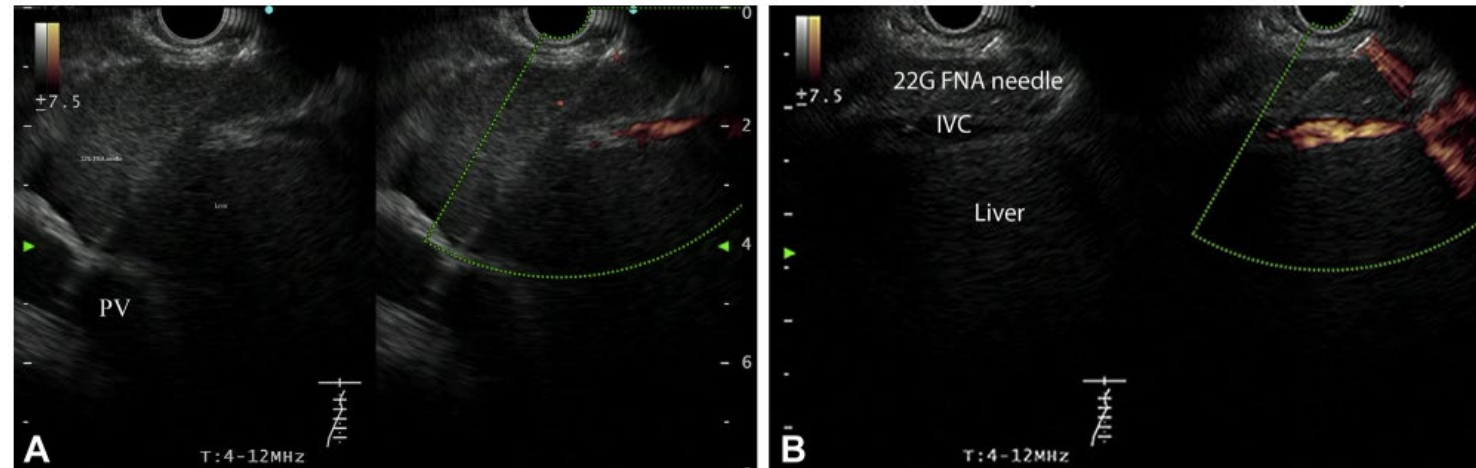
EUS-directed transenteric ERCP in non-Roux-en-Y gastric bypass surgical anatomy patients (with video)

- **Prior failed enteroscopy assisted ERCP: 55%**
- **EDEE technical success: 100%**
- **ERCP success after EDEE: 94.4%**

But we are still Gastroenterologist... (and obviously) Hepatologist!

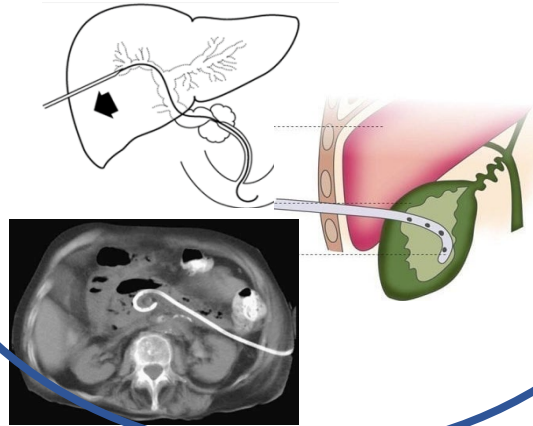


ENDO-HEPATOLOGY



(Zhang W, *Gastrointest Endosc*, 2021)

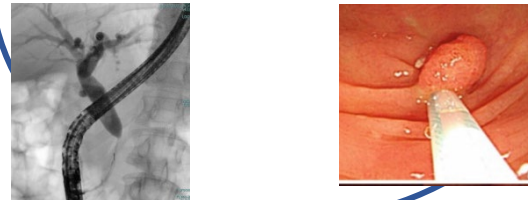
Interventional Radiology



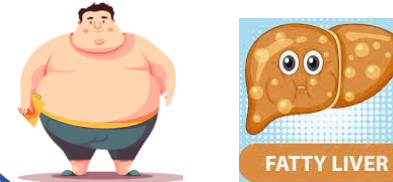
Surgery



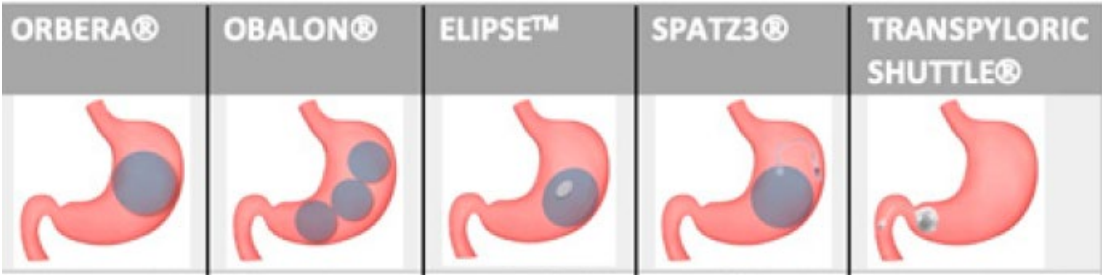
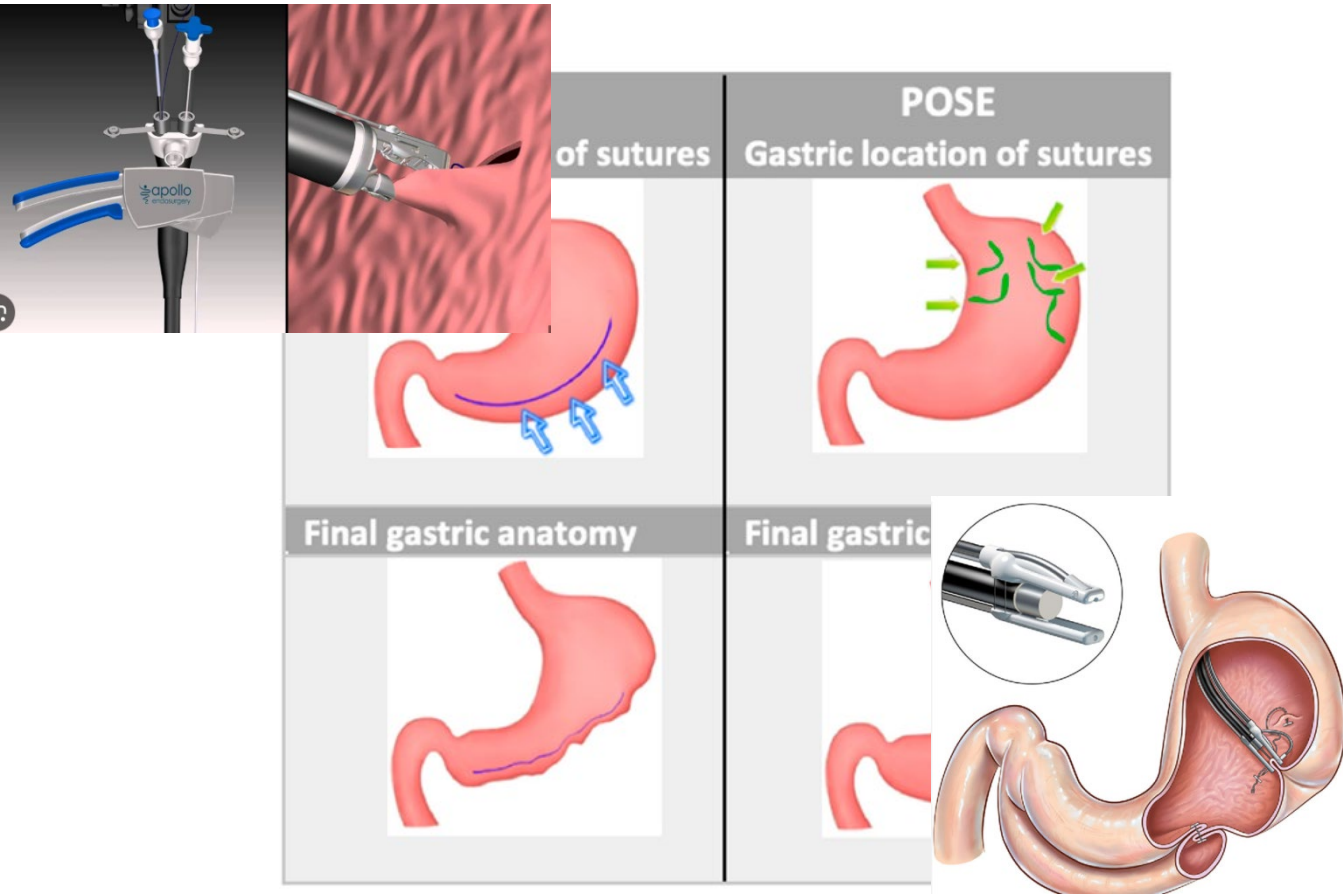
Operative Endoscopy



Internal medicine



Bariatric endoscopy



OCCUPAYING SPACE DEVICES

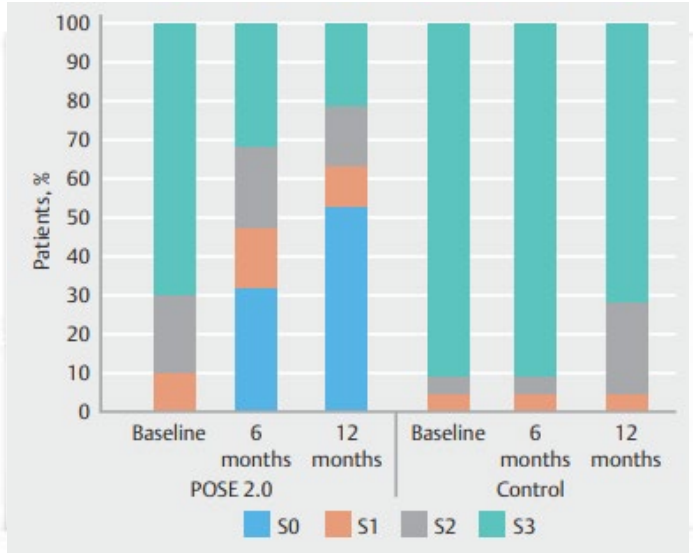
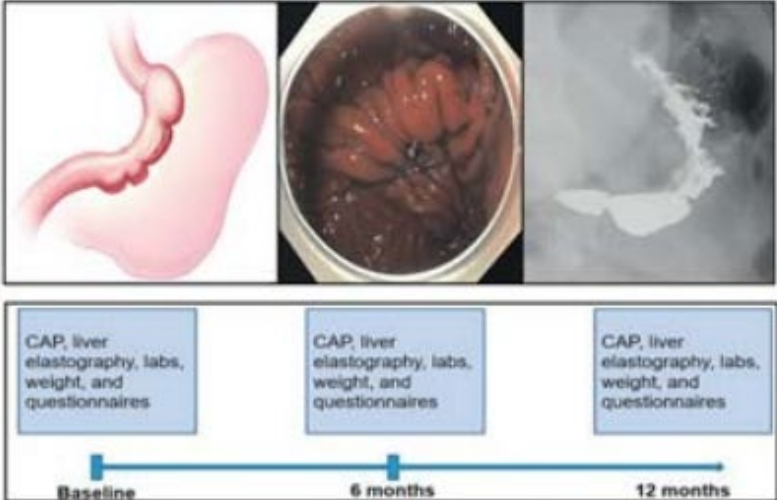
RESTRICTIVE PROCEDURE

(Mauro A, Medicina 2023)

THE METABOLIC ENDOSCOPY

Improvements in hepatic steatosis, obesity, and insulin-resistance in adults with nonalcoholic fatty liver disease after POSE 2.0 procedure

- The effectiveness of POSE 2.0 at treating nonalcoholic fatty liver disease is still unknown
- 42 adults were enrolled in a pragmatic prospective trial
 - 20 elected POSE 2.0
 - 22 elected lifestyle modification alone
- Primary outcome: controlled attenuation parameter (CAP) at 12 months



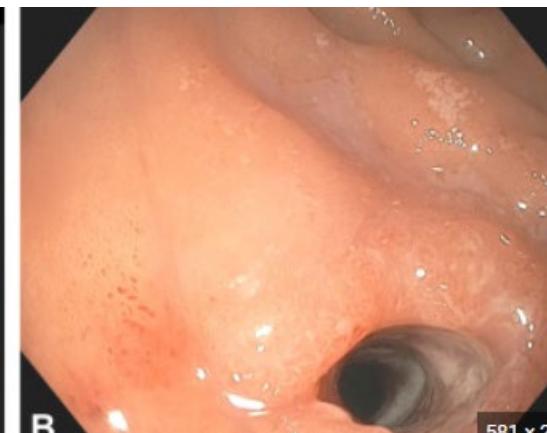
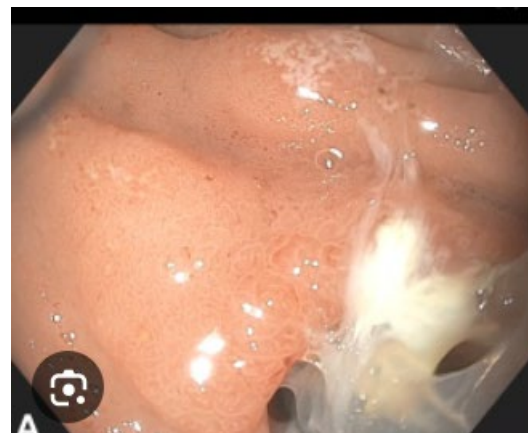
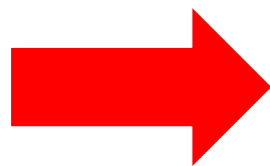
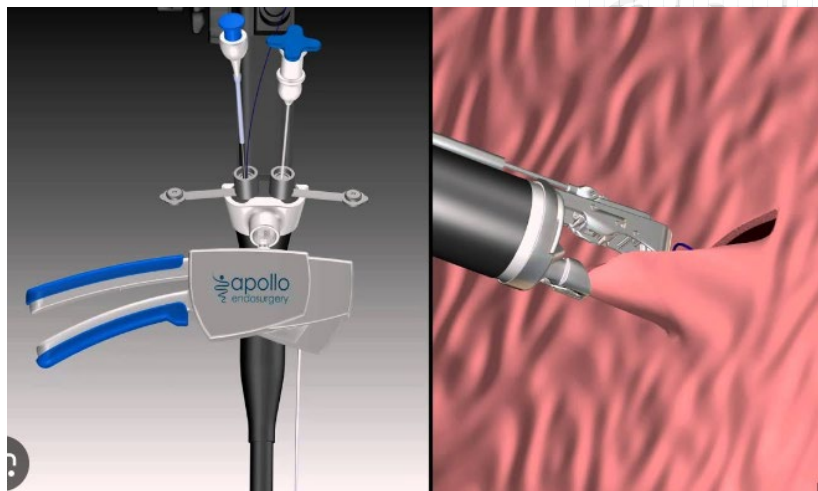
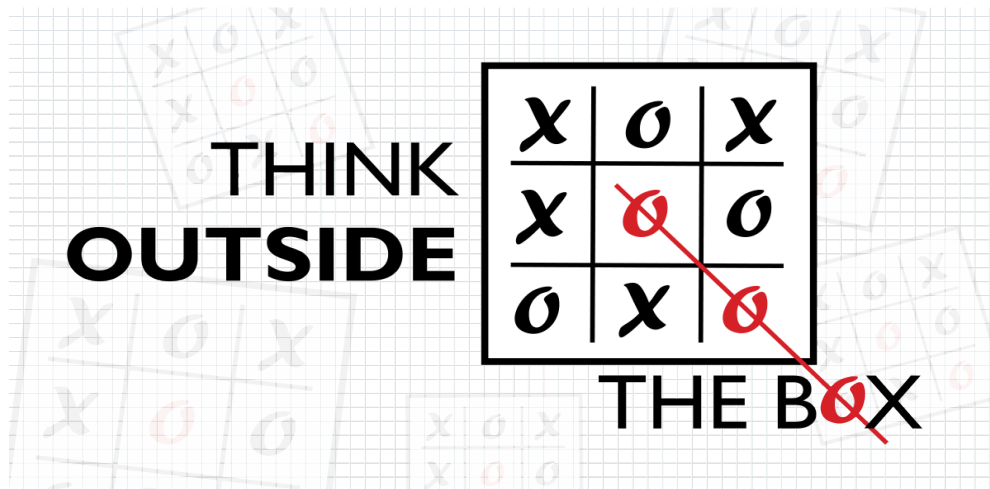
NAFLD, nonalcoholic fatty liver disease; POSE 2.0 is effective and safe in treating NAFLD in patients with obesity
 POSE 2.0, primary obesity surgery endoluminal 2.

Endoscopy

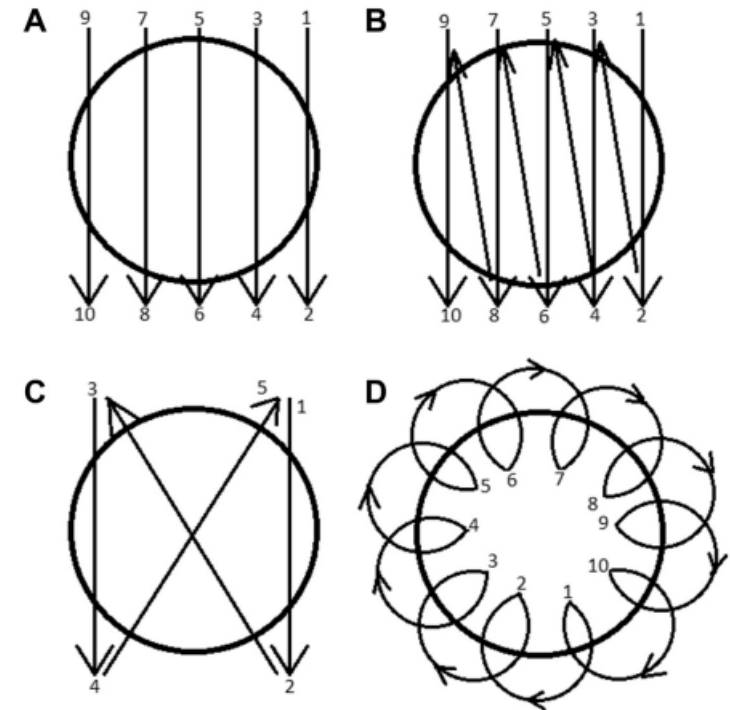
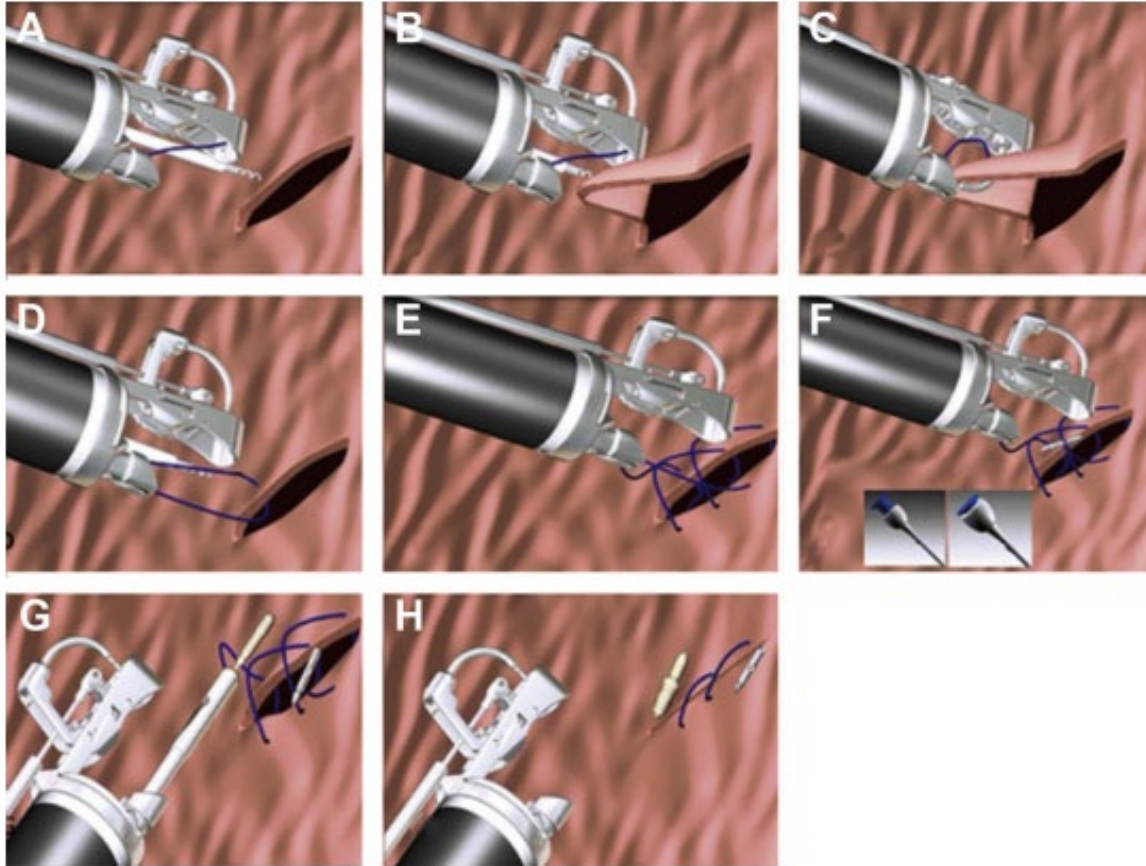
(Alkhatry M...Abu Dayyeh BK, Endoscopy, Nov 2023)

7

THINKING OUT OF THE BOX



Endoscopic suturing system for closure of parietal defects



(Ge PS, *Gastrointest Endosc Clin N Am*, 2020)

Neverending evolution of interventional endoscopy

X-Tack™
Endoscopic Helix Tacking System

The Next Evolution
in defect closure



Enhanced Fixation, Low Profile
Helix Tacks are designed with barbs for enhanced fixation in deep submucosal and intramuscular gastrointestinal tissue. Optimized length and flat driving tip delivers a low-profile suture-based construct.

Easily Span Difficult Defects
Helix Tacks tethered with a polypropylene suture allow for independent, through-the-scope placement of fixation points, eliminating the challenge of spanning defects.


Precise Closure
Applying suture tension approximates margins allowing for visual confirmation of defect closure prior to locking suture construct.





Through-the-scope (TTS) suturing system for colorectal endoscopic submucosal dissection (ESD) defect closure

Retrospective, multicenter 82 patients 30-mm median defect 92.7% complete closure



92.7% Technical success
7.3% Technical failure

- 3.7% Partial closure: TTS sutures only
- 1.2% TTS sutures + OTS clip
- 2.4% TTS suture device failure + TTS clip

Technical success:
Closure achieved using
• TTS sutures alone (58%)
• TTS sutures + TTS clips (42%)

The TTS suture system consists of a suture preloaded with four 5-mm surgical-steel helix tacks, deployed here to close a post-ESD defect

Endoscopy

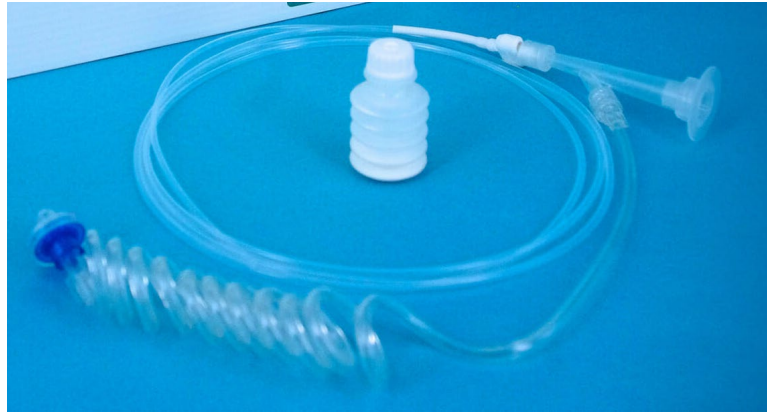
(Farha J, Endoscopy 2023)

Perforation is not the only endoscopic complication....

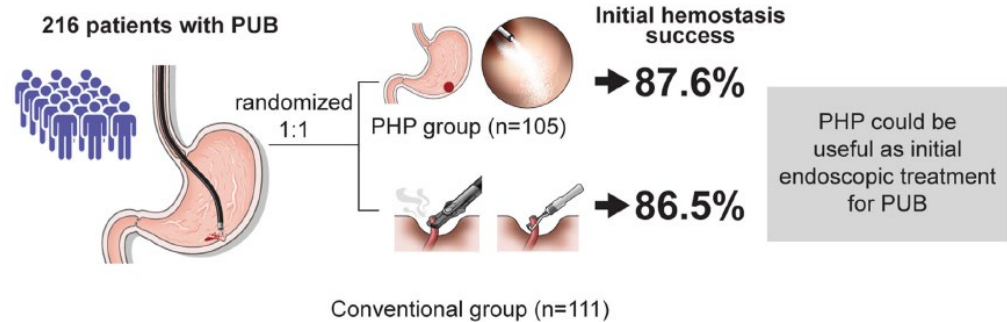


(Farha J, Endoscopy 2023)

POWER TO THE POWDER

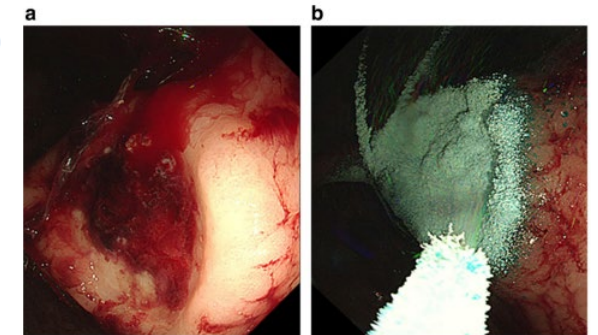


Polysaccharide hemostatic powder for peptic ulcer bleeding



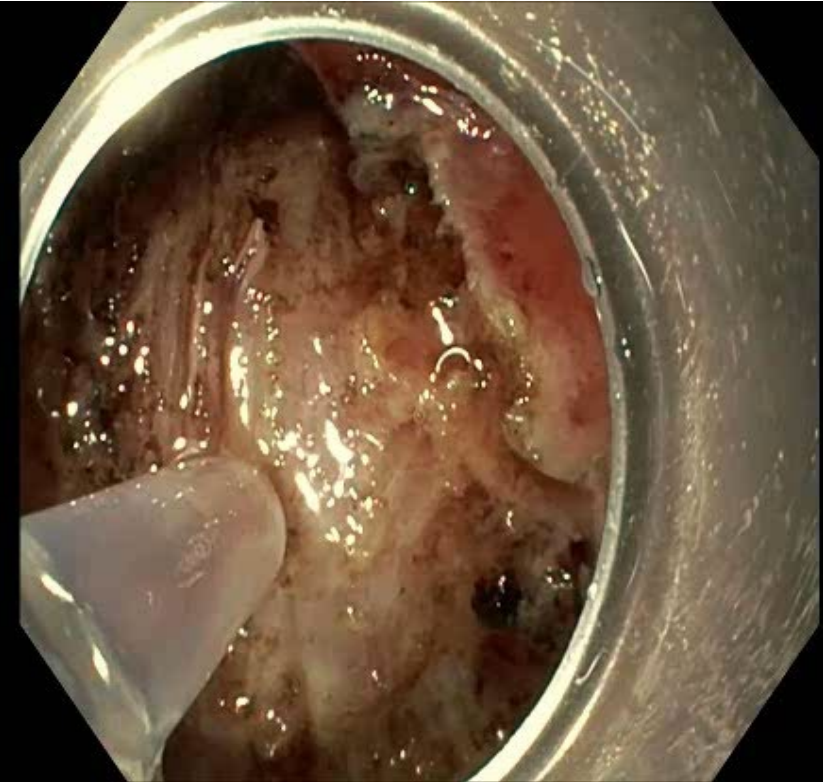
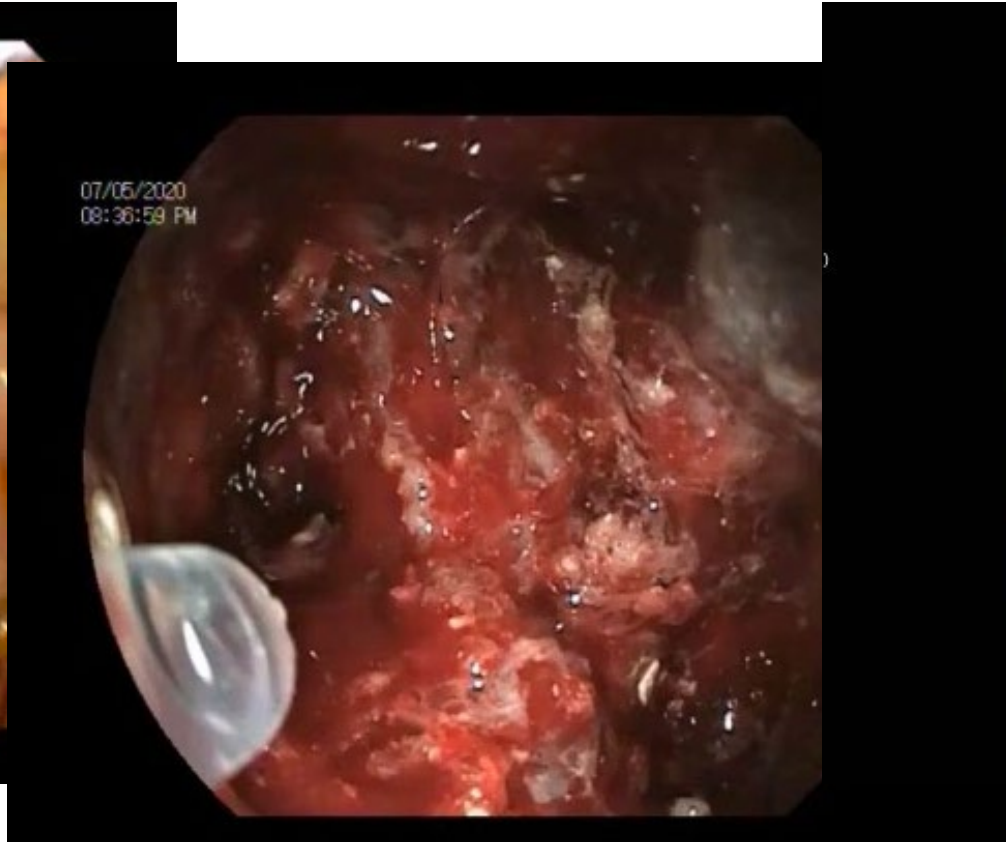
Efficacy of a novel hemostatic adhesive powder in patients with upper gastrointestinal tumor bleeding

Jongbeom Shin, Boram Cha, Jin-Seok Park^{*}, Weonjin Ko, Kye Sook Kwon, Jin-Woo and Yong Woon Shin



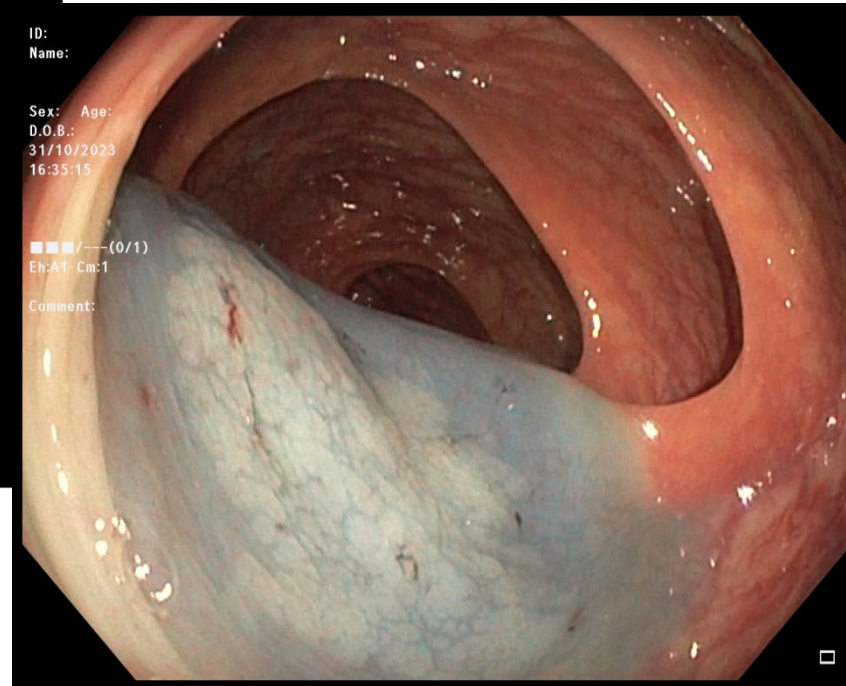
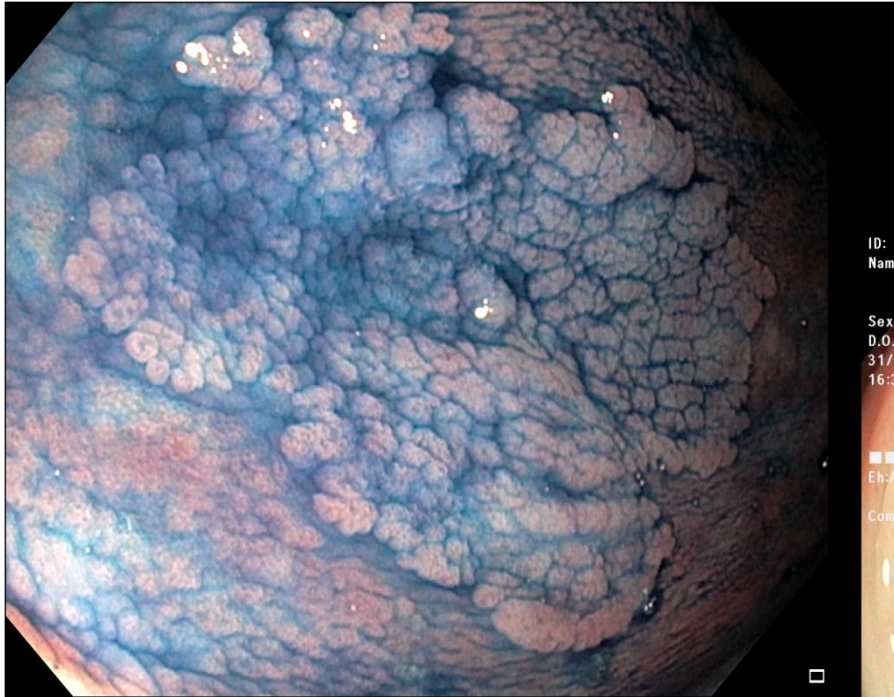
(Jung D.H, *Clin Gastroenterol Hepatol* 2023; Shin J, *BMC Gastroenterol* 2022)

EXPANDING INDICATIONS FOR GEL IN ENDOSCOPY



(Binda C, Medicina 2023;Dhar J, Facciorusso A, Exp Rev Gastroenterol Hepatol 2023)

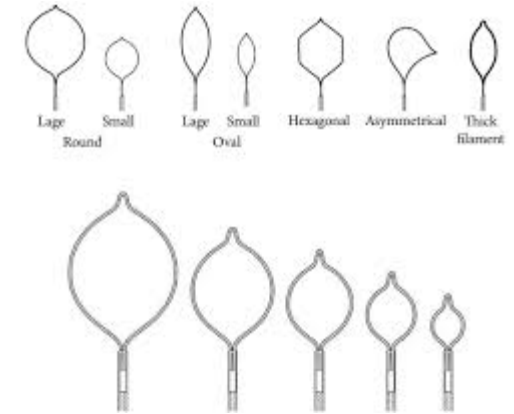
Prevention is better than cure!



ID:
Name:

Sex: Age:
D.O.B.:
31/10/2023
16:35:15

■■■■/---(0/1)
Eh:A1 Cm:1
Comment:



How to remove the lesion?

0-IIa and 0-IIb granular LST of ascending colon

THE COLD REVOLUTION

Cold snare endoscopic mucosal resection for colon polyps: a systematic review and meta-analysis

Authors

Mohamed Abdallah¹, Khalid Ahmed², Daniyal Abbas³, Moul McDonald¹, Natalie Wilson¹, Shifa Umar⁵, Aasma Shaukat⁶, A

Original research
van Hattem WA, et al. *Gut* 2021;**70**:1691–1697. doi:10.1136/gutjnl-2020-321753

Piecemeal cold snare polypectomy versus conventional cold snare polypectomy versus hot snare polypectomy for large sessile serrated lesions: a retrospective analysis across two successive periods
W Arnout van Hattem ¹, Neal Shahidi ^{1,2,3}, Sergio Kaushali Britto ^{6,7}, Mayenaaz Sidhu ^{1,3}, Iddo Bar-Yishay ^{10,11}, David James Tate ^{1,8}, Karen Byth ⁹, David G Hewett ^{10,11}, Luke F Hourigan ^{13,14}, Alan Moss ^{4,5}, Nicholas Tutticci ^{6,7}, Michael J Bou

Cold versus hot EMR for large duodenal adenomas
Alessandro Repici ^{1,2}, Antonio Capogreco ¹, Spadaccini Marco ¹, Roberta Maselli ^{1,2}, Piera Alessia Galtieri ¹, Alessandro Fugazza ¹, Silvia Carrara ¹, matteo colombo ¹, Guido Schachschal ³, Anna Creutzfeldt ³, Shahila Perveen Aslam ⁴, Asma Alkandari ⁴, Pradeep Bhandari ⁴, Alexander Meining ⁵, Cesare Hassan ^{1,2}, Thomas Rösch ³

Repici A, et al. *Gut* 2022;**71**:1763–1765. doi:10.1136/gutjnl-2022-327171

Cold snare resection is now suggested for LST lesions and sessile serrated lesions of the right colon and for duodenal non-ampullary adenomas

top
ten

in gastroenterologia

14[^] EDIZIONE

24-25 NOVEMBRE 2023

BERGAMO

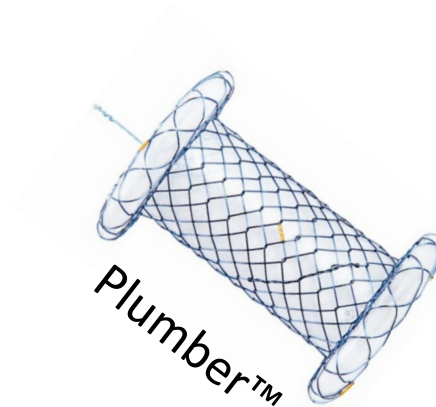
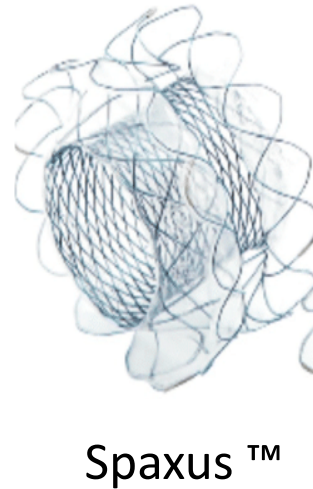
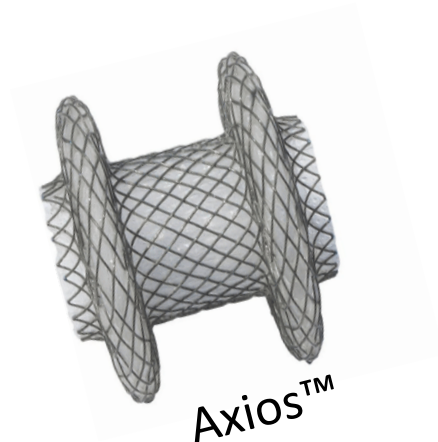
HOTEL EXCELSIOR SAN MARCO
Piazza della Repubblica, 6

TOP TEN Slides

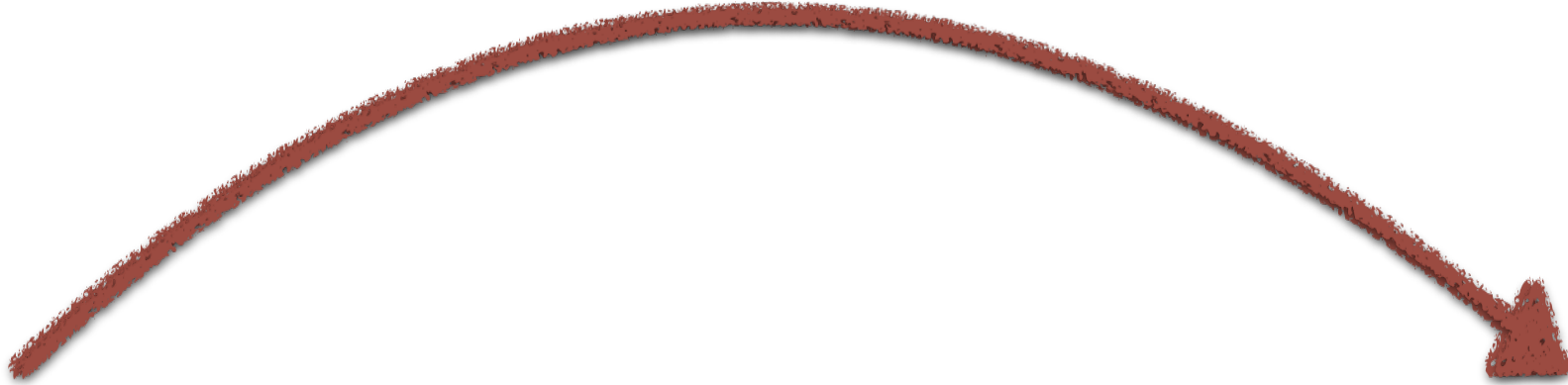
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LUMEN APPOSING METAL STENT

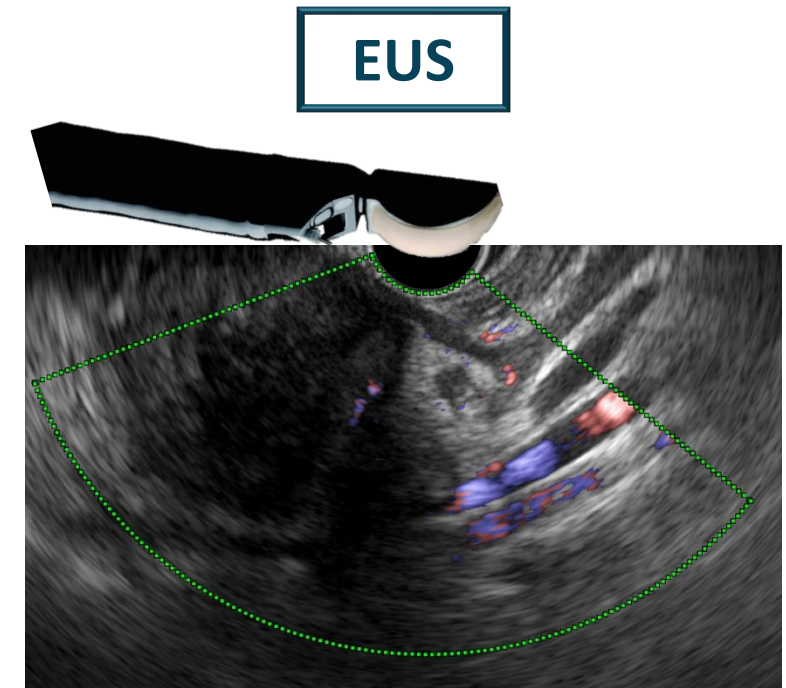
- Make difficult things easier
- Allow me to do “NEW” things



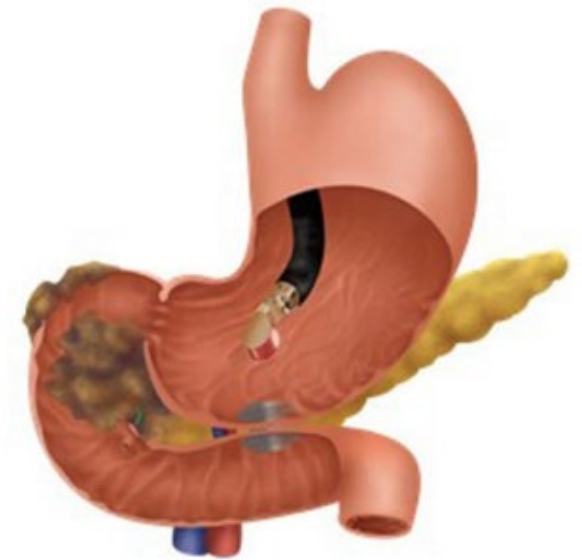
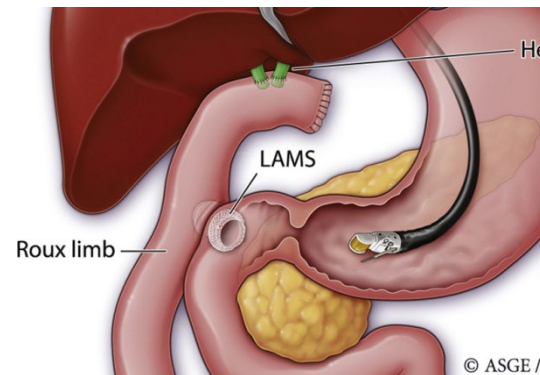
THE FRAIL PATIENT AT THE CENTER OF TREATMENT



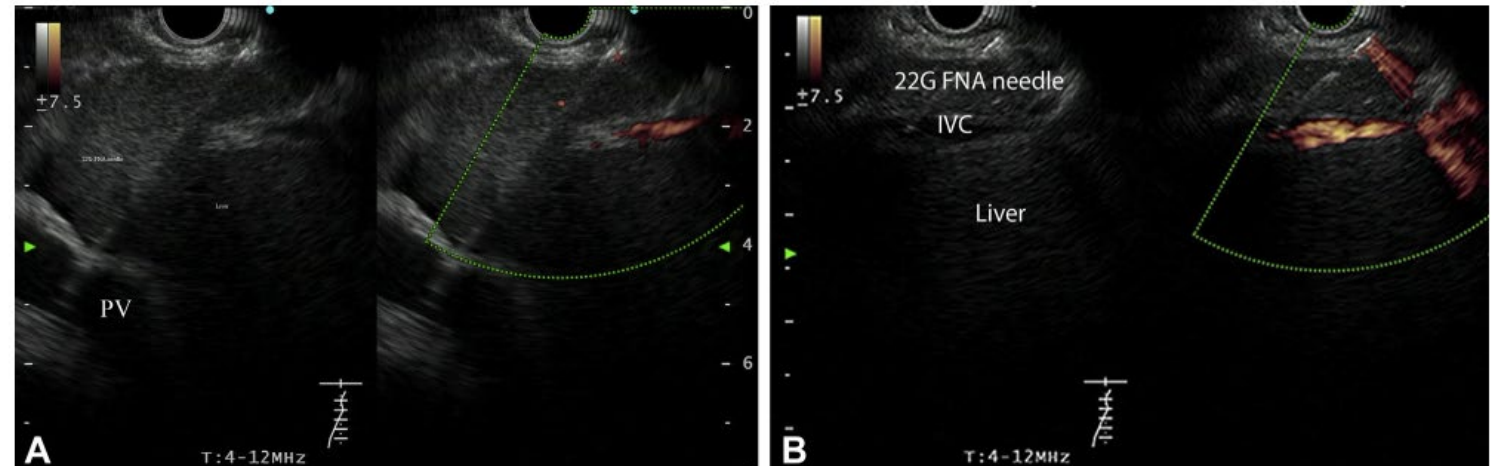
- EUS guided biliary drainage is now performed:
 - In case of failed ERCP
 - As a primary treatment when ERCP is not feasible or presumed to be difficult



- EUS guided gastroentero anastomosis:
 - Is more efficient than duodenal stenting in case of gastric outlet obstruction
 - Could be applied to drive ERCP drainage in case of altered anatomy



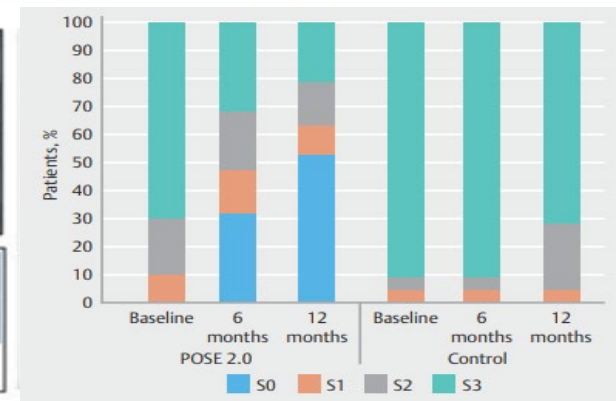
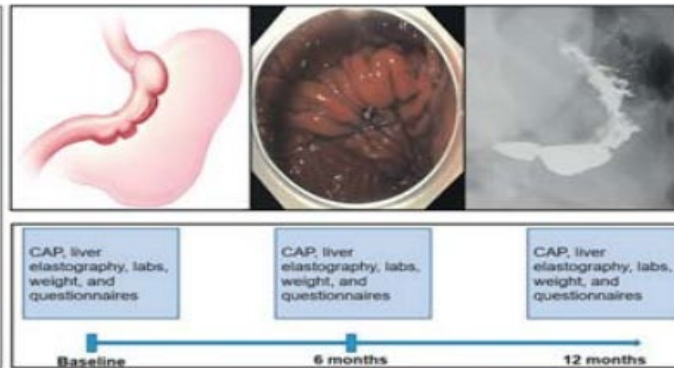
- Interventional EUS is now applied in patients with portal hypertension:
 - EUS measurement of HVPG is comparable to interventional radiology measure



- Bariatric endoscopy is now applied not only for obesity treatment but also to treat metabolic complications of obesity

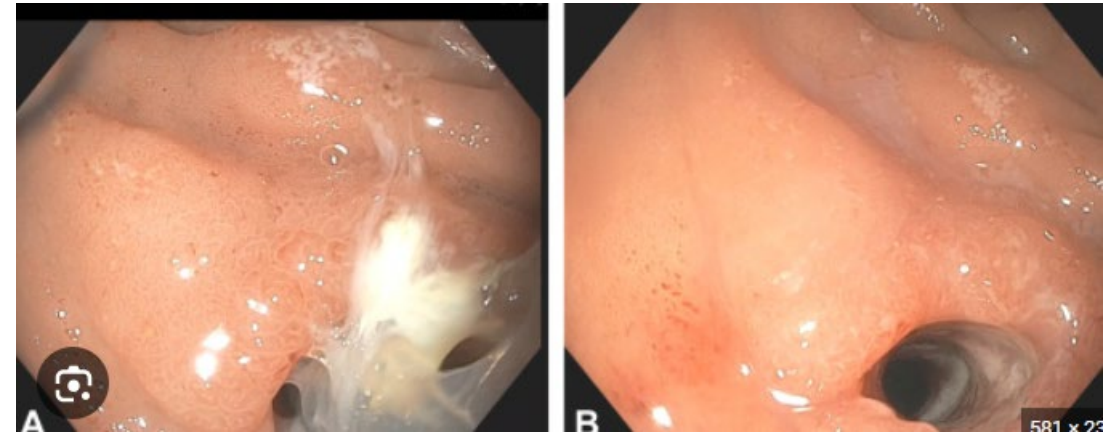
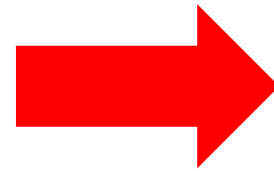
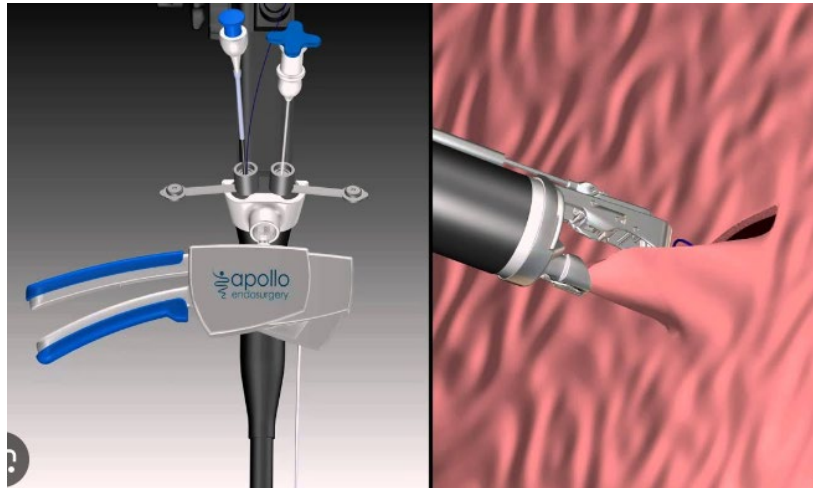
Improvements in hepatic steatosis, obesity, and insulin-resistance in adults with nonalcoholic fatty liver disease after POSE 2.0 procedure

- The effectiveness of POSE 2.0 at treating nonalcoholic fatty liver disease is still unknown
- 42 adults were enrolled in a pragmatic prospective trial
 - 20 elected POSE 2.0
 - 22 elected lifestyle modification alone
- Primary outcome: controlled attenuation parameter (CAP) at 12 months



NAFLD, nonalcoholic fatty liver disease; POSE 2.0 is effective and safe in treating NAFLD in patients with obesity
POSE 2.0, primary obesity surgery endoluminal 2.

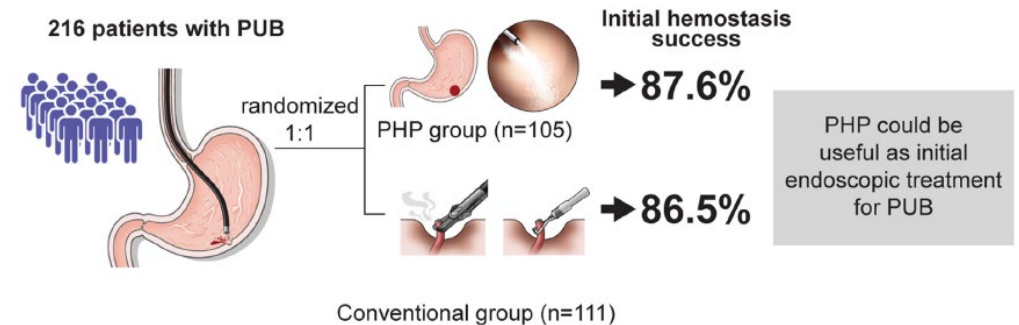
- Endoscopic suturing systems have demonstrated efficacy to treat iatrogenic perforations or post-surgical fistula



POWER TO THE POWDER

- Different powder are now available in endoscopy:
 - They are efficient in case of primary upper non-variceal bleeding
 - Recurrent upper non-variceal bleeding
 - Prevention of bleeding after ESD or EMR

Polysaccharide hemostatic powder for peptic ulcer bleeding



- Application of gel could be now applied to prevent bleeding from:
 - Pancreatic fluid collection after necrosectomy
 - Post-ampullary area
 - Post-ESD area

- Cold snare resection is now suggested for
 - LST lesions of the right colon
 - Sessile serrated lesions
 - Duodenal non-ampullary adenomas

