



# 2022 Hot Topics in Advanced Endoscopy

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# Disclosure

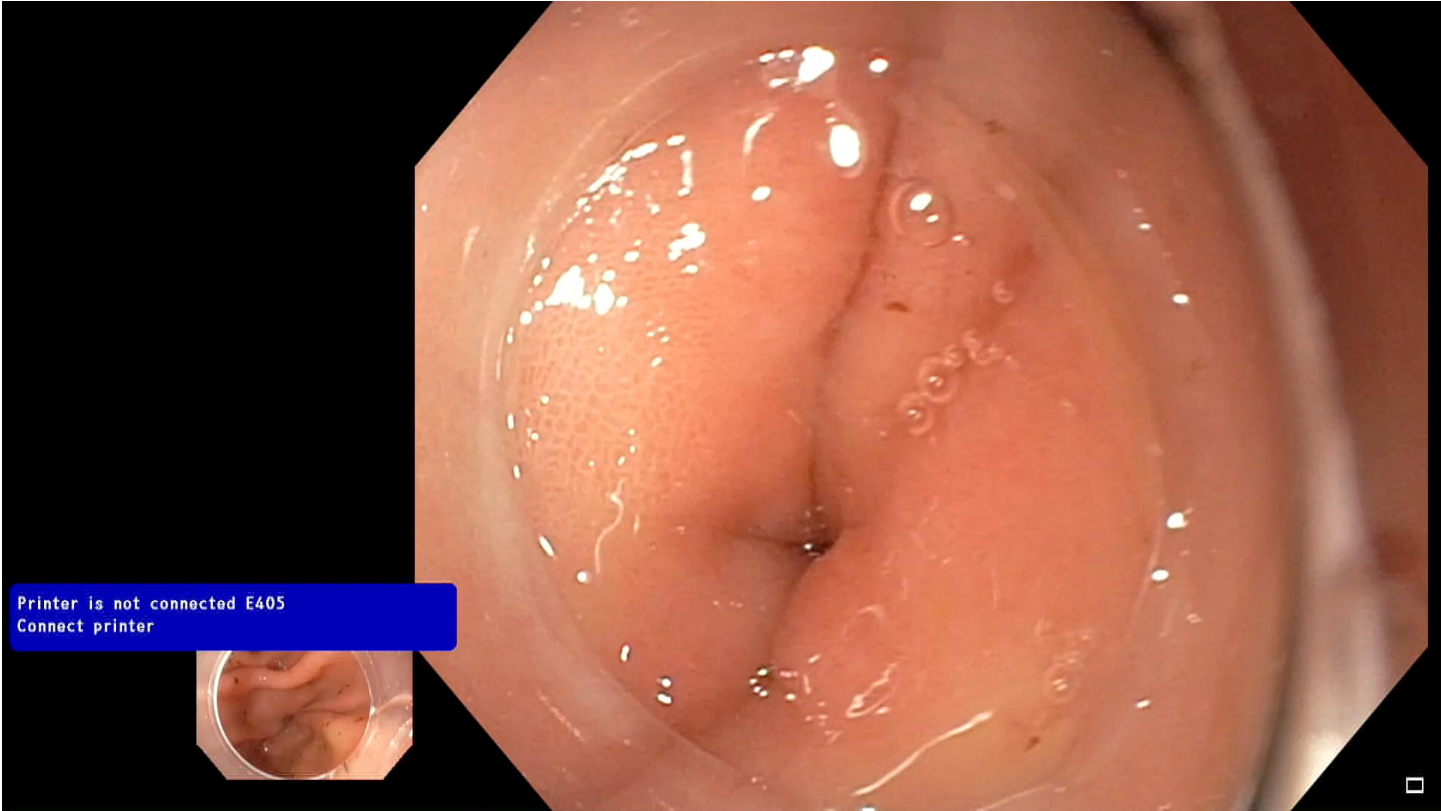
- Consultant: Capsovision and Intuitive Surgical

# Hot Topics

- G-POEM and other endoscopic myotomies
- Advances in Endoscopic Resection
- Gastrojejunostomy and other anastomoses

# G/Z/D-POEM

- POEM has revolutionized achalasia treatment
- Emerging data on endoscopic pyloromyotomy, Zenker's treatment and esoph diverticulum rx
- Is G-POEM poised to revolutionize gastroparesis treatment?



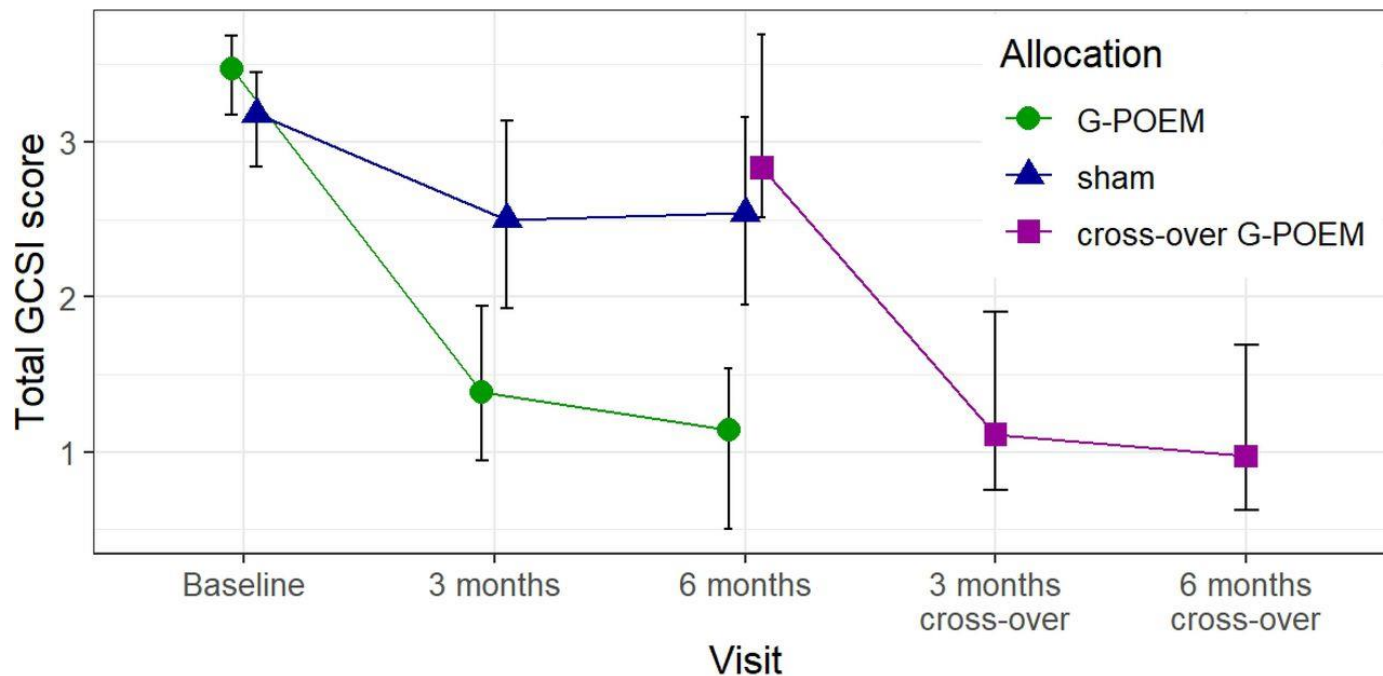
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# G-POEM

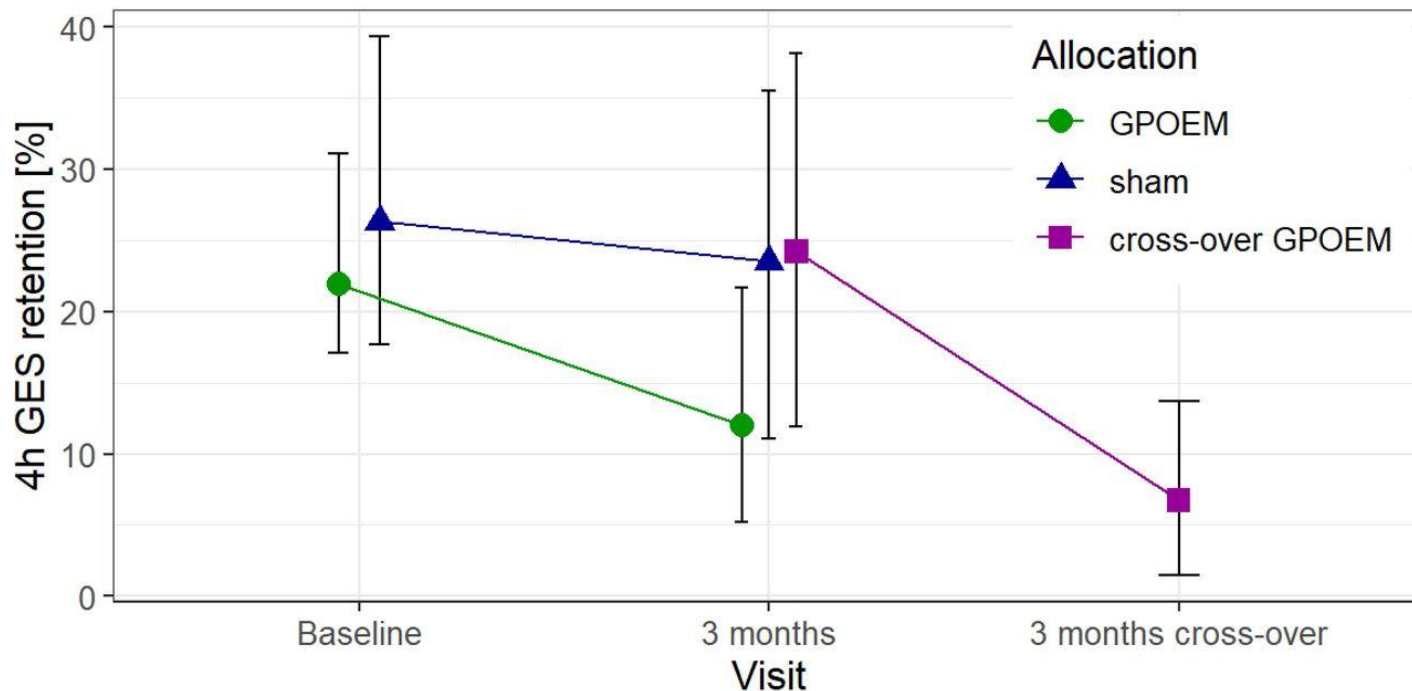
- J Martinek and colleagues reported results of a randomized (sham control) study of G-POEM
- Study stopped early after interim analysis at 41 patients showed efficacy of G-POEM
- Primary outcome: 50% decrease in Gastroparesis Cardinal Symptom Index at 6 months was met in 71% G-POEM vs 22%
- Relatively minor adverse events: 1 mucosal injury, 1 pyloric ulcer and 1 admit for dumping syndrome



# Evolution of the Gastroparesis Cardinal Symptom Index (GCSI) Total Score.



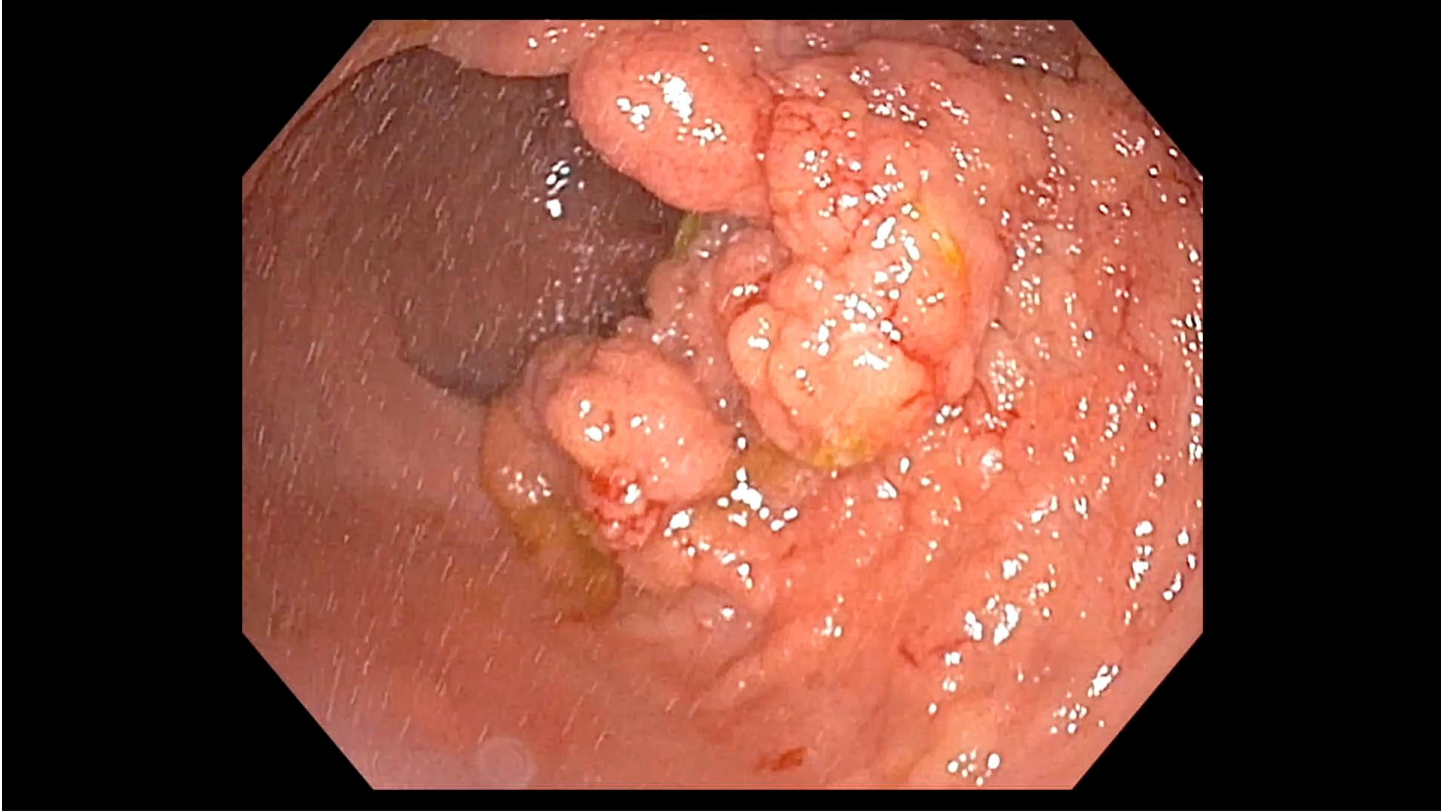
# Evolution of Gastric Retention at 4 Hours After Meal Ingestion on a Standardised Sulphur Colloid Solid-Phase Gastric Emptying Study (Scintigraphy).





# Endoscopic Resection

- Endoscopic submucosal dissection (ESD) has had slow uptake in USA
- ESD is effective for early Barrett's cancers and for large rectal polyps that may contain cancer
- ESD can be used to resect large colon polyps with <2% recurrence rates



# J Jacques et al. DDW 2022: Colon EMR vs ESD

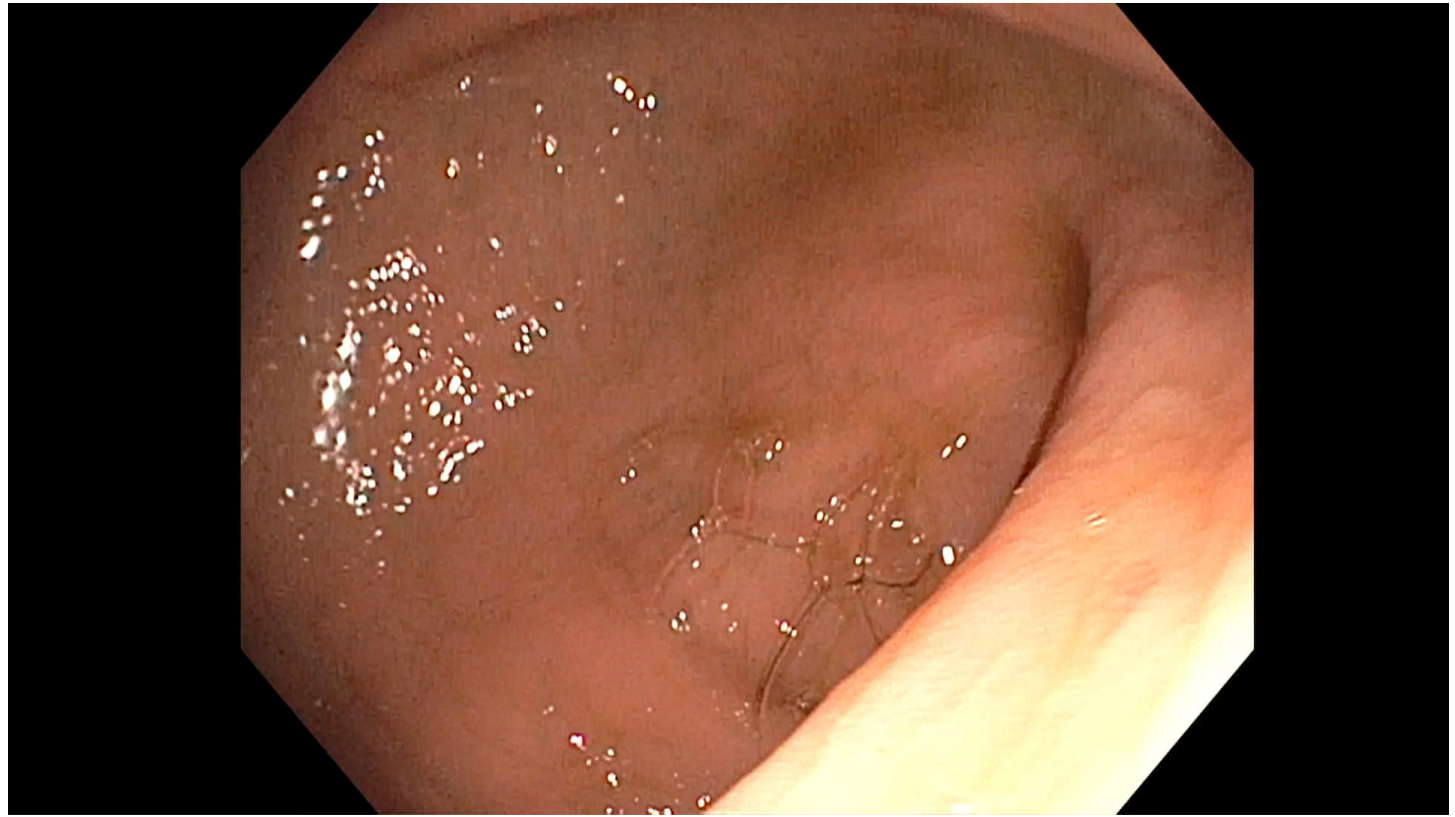
- RCT: 6 centers in France, 11 endoscopists, 359 patients
- >25mm lesions. Excluded rectal and depressed lesions (ethical)
- Recurrence at 6 months **5.1% EMR vs 0.6% ESD** ( $p = 0.02$ )
- R0 resection 12% vs 94% ( $p < 0.001$ ), bleeding 5.5% vs 7.9% ( $p = \text{NS}$ ), surgery for complication 0% vs 1% ( $p = \text{NS}$ ), duration 71min vs 113min ( $p < 0.001$ )
- **Superficial submucosal cancer: 0.5% vs 3.5%** ( $p = 0.08$ ); deep submucosal cancer 3.8% vs 4% ( $p = \text{NS}$ )
- **ESD safe, superior to EMR. Pathology exam on piecemeal specimen likely misclassifies 6/7 superficial cancers as benign adenomas**

# Colorectal ESD

- We reviewed Stanford experience at DDW 2022
- 376 patients: 122 ESD, 44 Knife-Assisted Polypectomy, 216 EMR
- En bloc resection highest with ESD (90% vs 31% vs 20%) despite ESD lesions being larger (36mm vs 33mm vs 30mm)
- Recurrence rate ESD 1.7%, Knife-Assisted 0%, EMR 11.5%
- Overall similar complication rate 6.5-6.8% but 3 perforations in ESD group (2 requiring surgery)

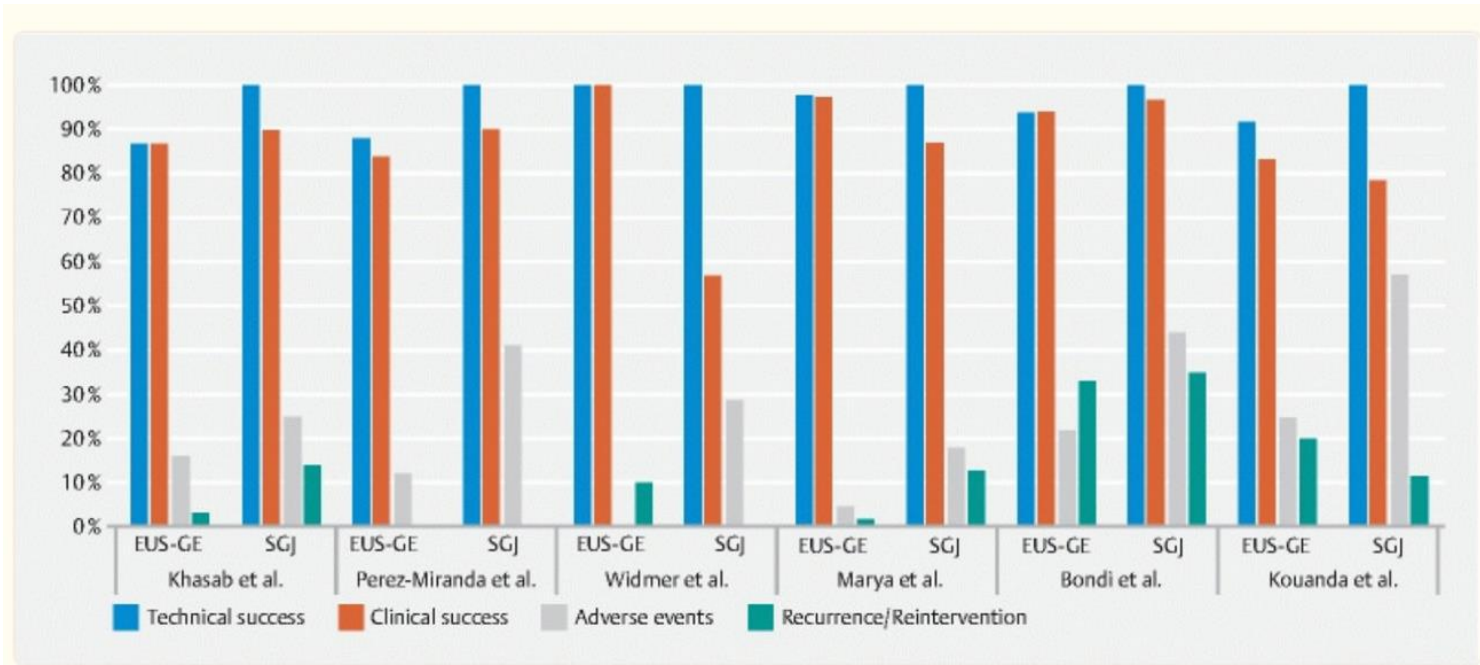
# Endoscopic Anastomoses

- Endoscopic gastrojejunostomy: initial data mixed (high complication rate) but improvement in technique has made it attractive, especially for patients with advanced cancer
- EUS biliary and Gallbladder drainage are widely available
- For cancer patients, EUS biliary drainage is being compared to ERCP





# EUS vs Surgical GJ



Similar clinical success but fewer adverse events with EUS.  
Bomman S. *Endosc Int Open*. 2022.

# Conclusions

- G-POEM is safe and effective for gastroparesis. Future studies will help determine optimal candidates
- In a multicenter RCT, ESD demonstrated to be superior to EMR for large colon polyps
- EUS-guided gastrojejunostomy and other EUS-guided anastomoses are increasingly utilized