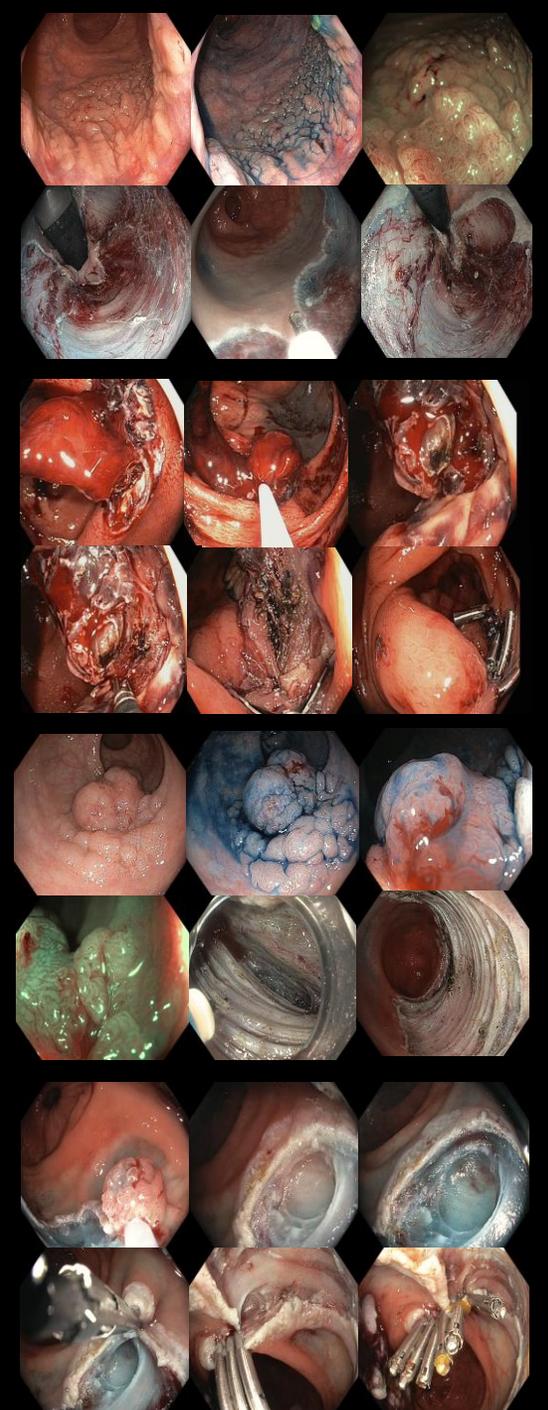


A Multi-Disciplinary Approach to Large Colorectal Polyps

Neal Shahidi MD FRCPC and Ahmer Karimuddin MD FRCSC
Divisions of Gastroenterology and General Surgery, St. Paul's Hospital

BC Cancer Colonoscopy Education Session:
Management of Large Colorectal Polyps



No Disclosures

Colorectal polypectomy and endoscopic mucosal resection (EMR): European Society of Gastrointestinal Endoscopy (ESGE) Clinical Guideline



Fertlich et al. Endoscopy 2017;49:270-297

RECOMMENDATION

The majority of colonic and rectal lesions can be effectively removed in a curative way by standard polypectomy and/or by EMR. (Moderate quality evidence; strong recommendation.)

CLINICAL PRACTICE GUIDELINES

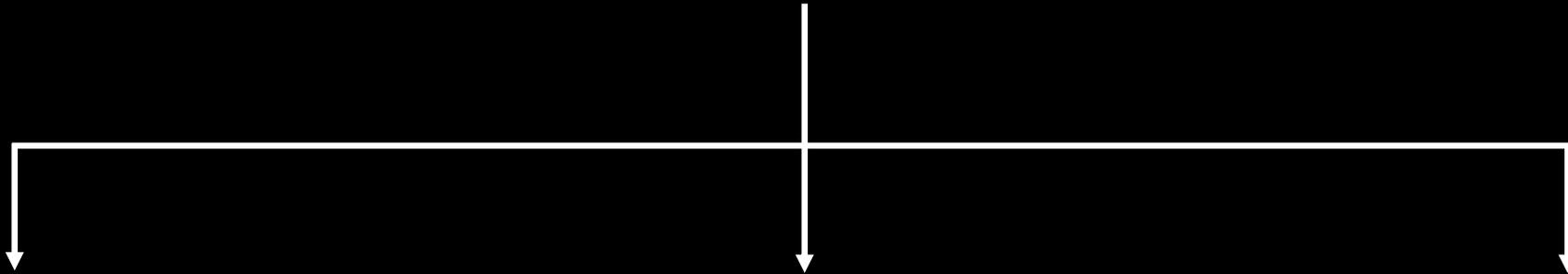
Endoscopic Removal of Colorectal Lesions—Recommendations by the US Multi-Society Task Force on Colorectal Cancer



Kaltenbach et al. Gastroenterology 2020;158:1095-1129

We recommend EMR as the preferred treatment method of large (≥ 20 mm) non-pedunculated colorectal lesions. Endoscopic resection can provide complete resection and obviate the higher morbidity, mortality, and cost associated with alternative surgical treatment. (Strong recommendation, moderate-quality evidence)

How did this come to pass...

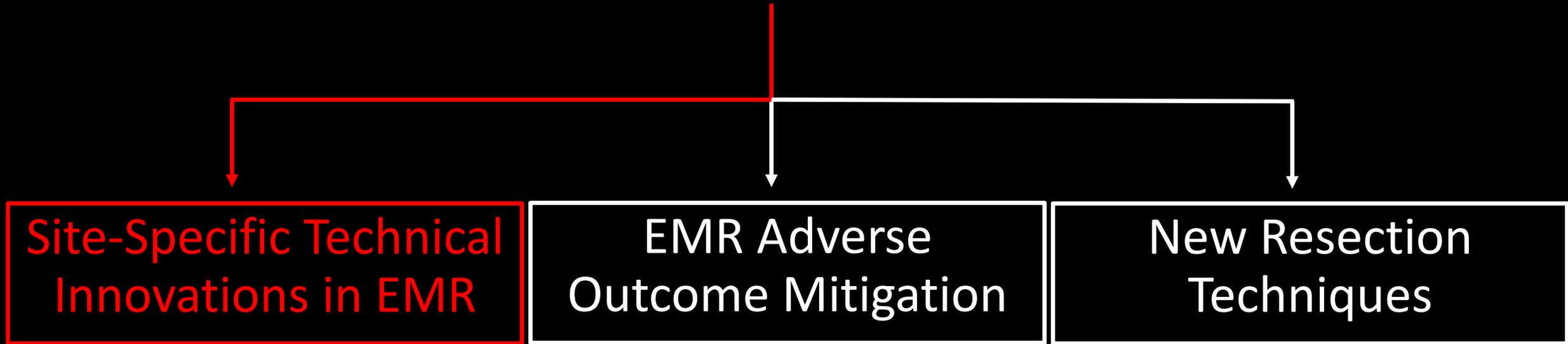


Site-Specific Technical
Innovations in EMR

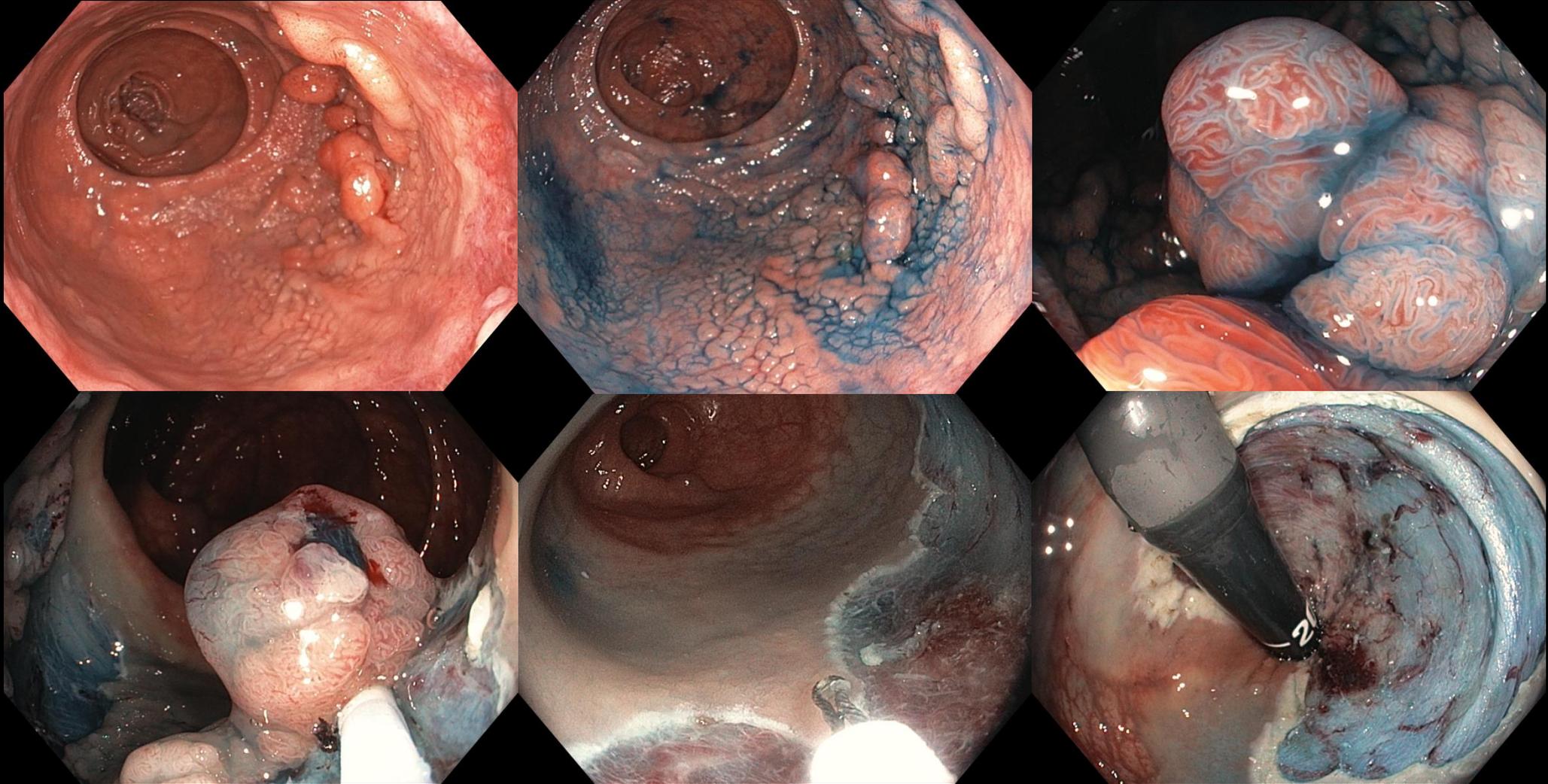
EMR Adverse
Outcome Mitigation

New Resection
Techniques

How did this come to pass...



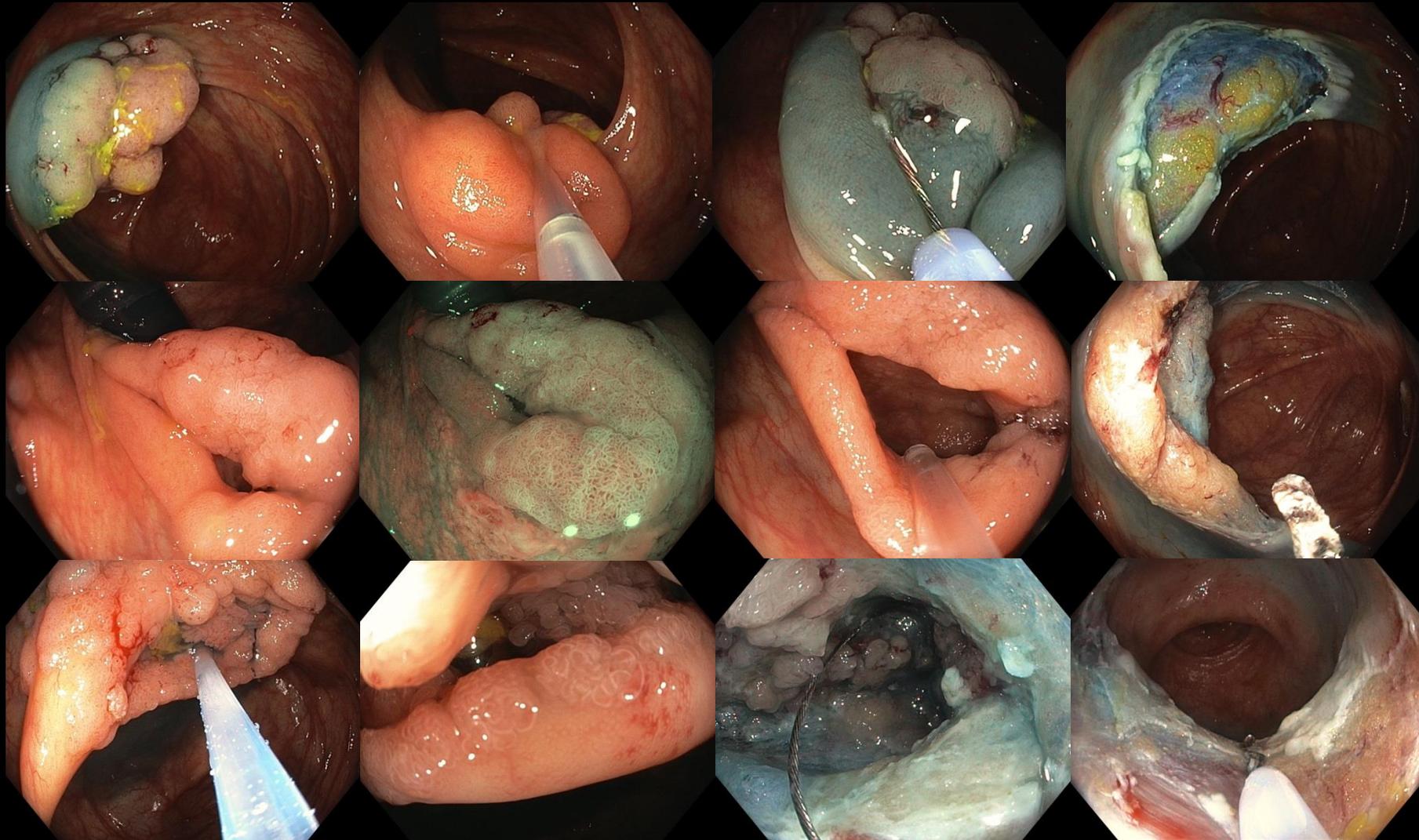
At the Anorectal Junction



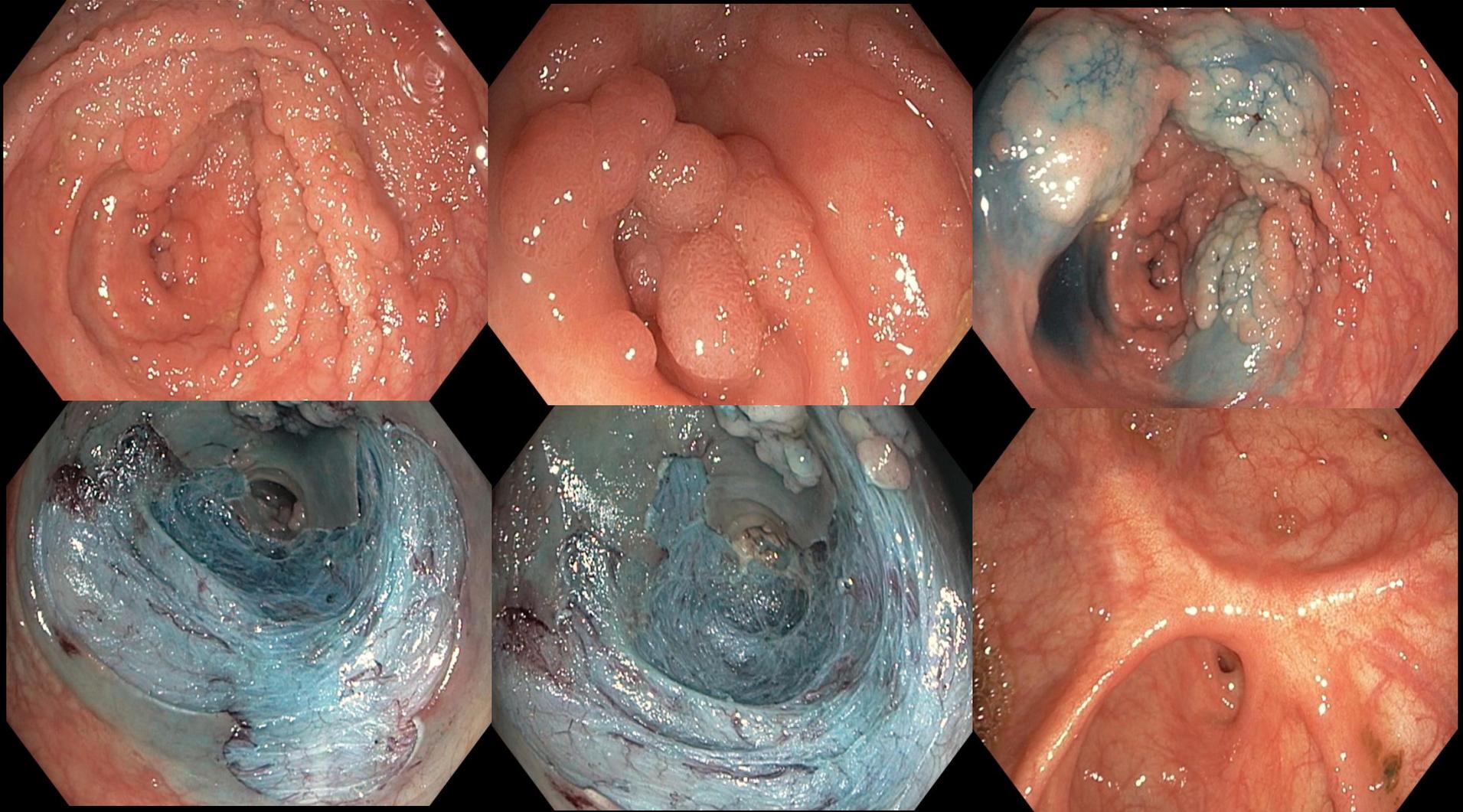
Shahidi et al. Gut 2020;69:673-680

Holt et al. Gastrointest Endosc 2014;79:119-126

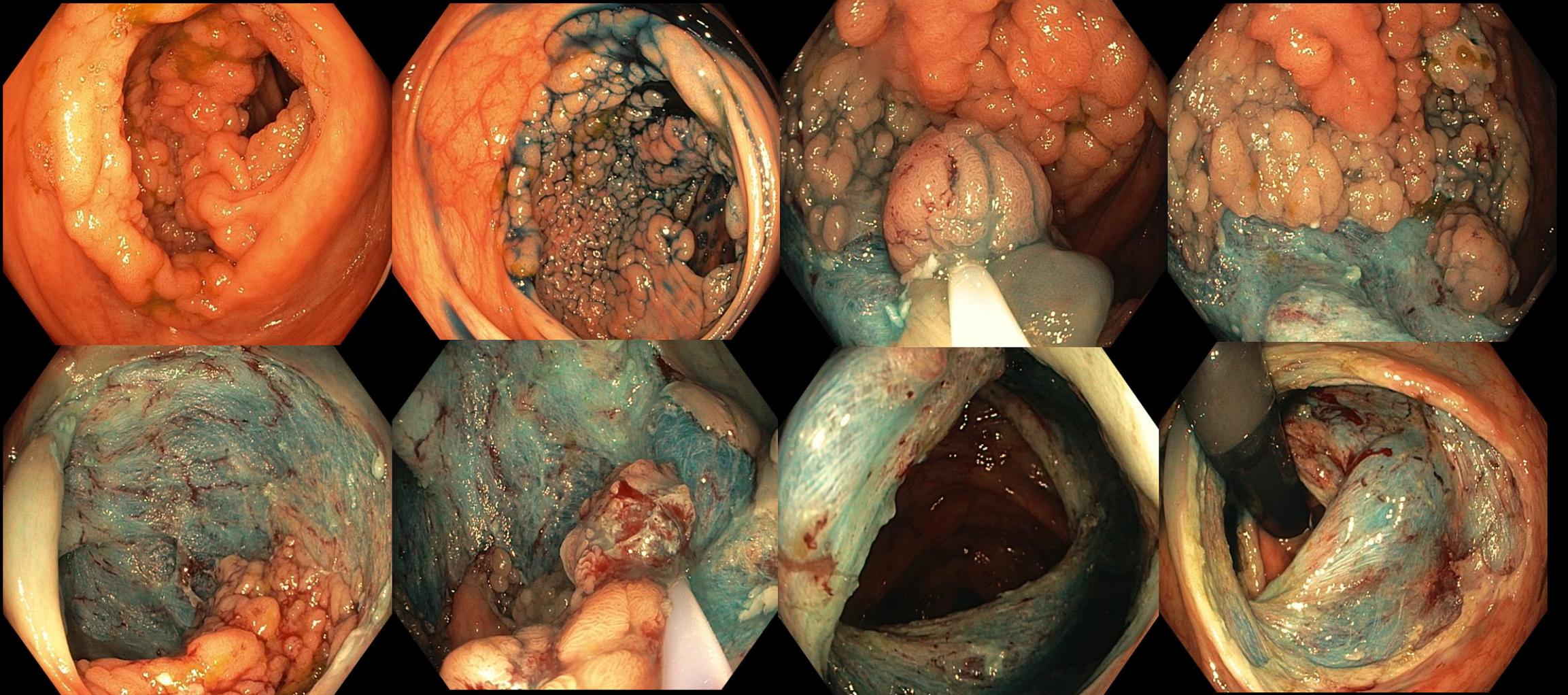
At the Ileocecal Valve



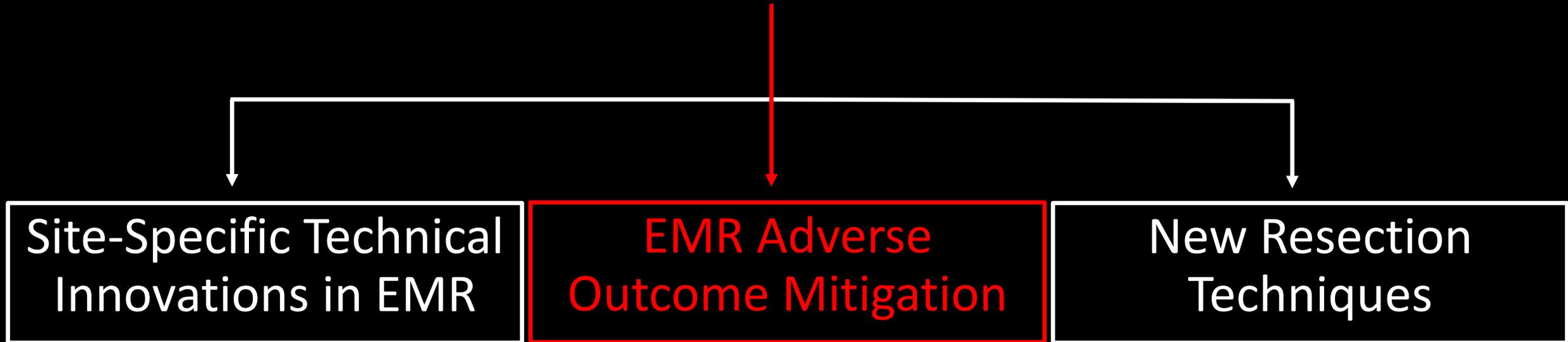
Peri-Appendiceal



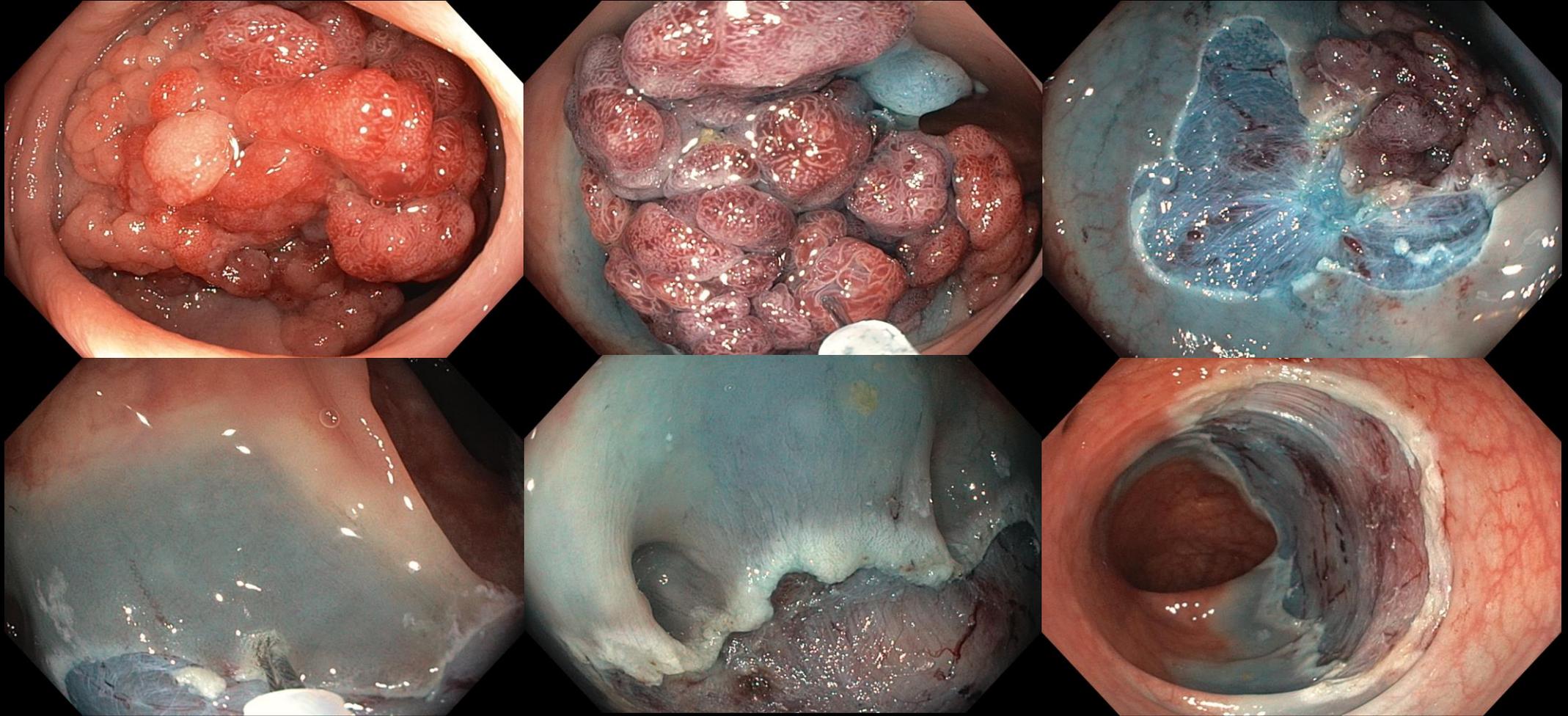
Circumferential



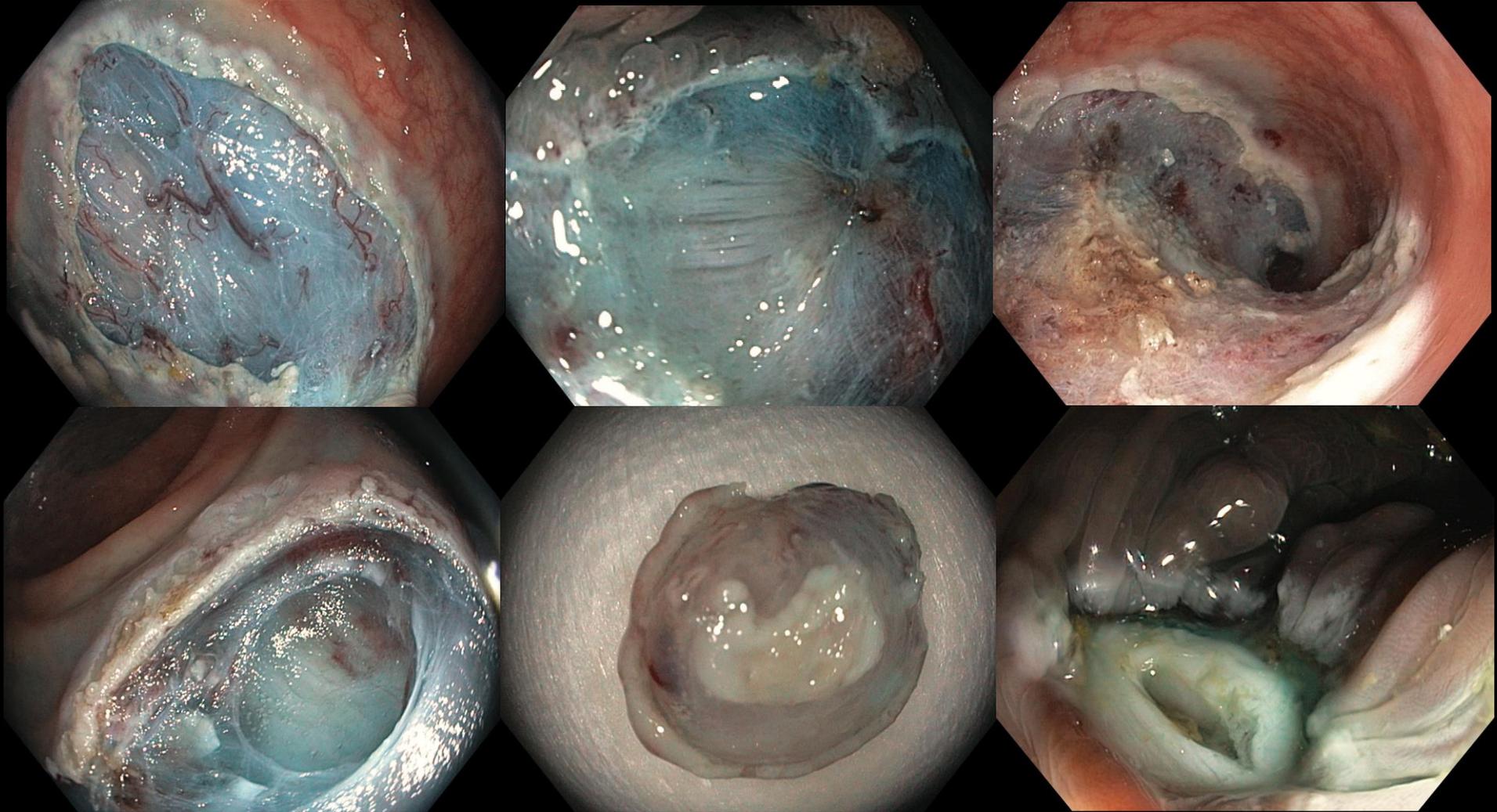
How did this come to pass...



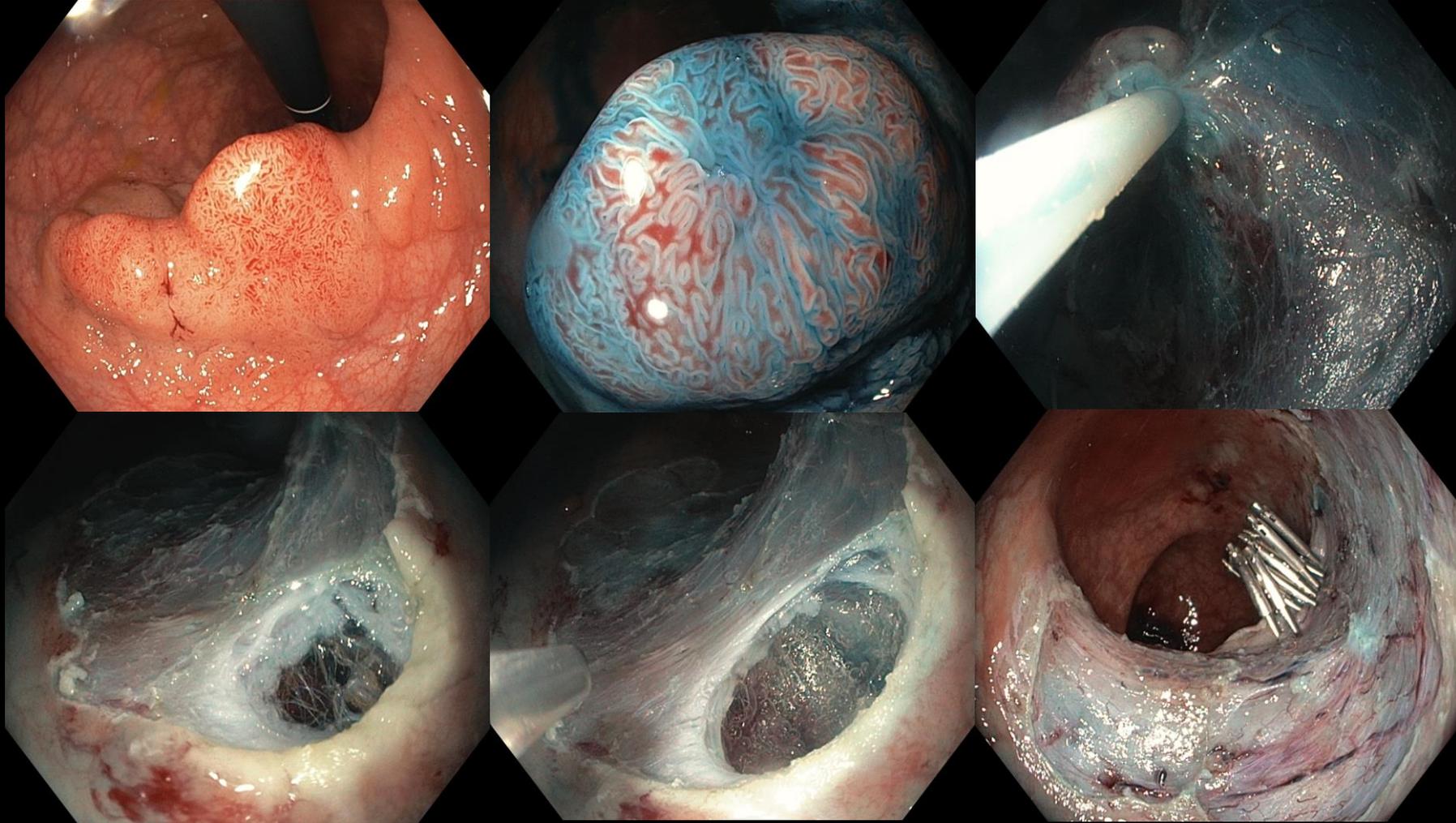
Recurrence



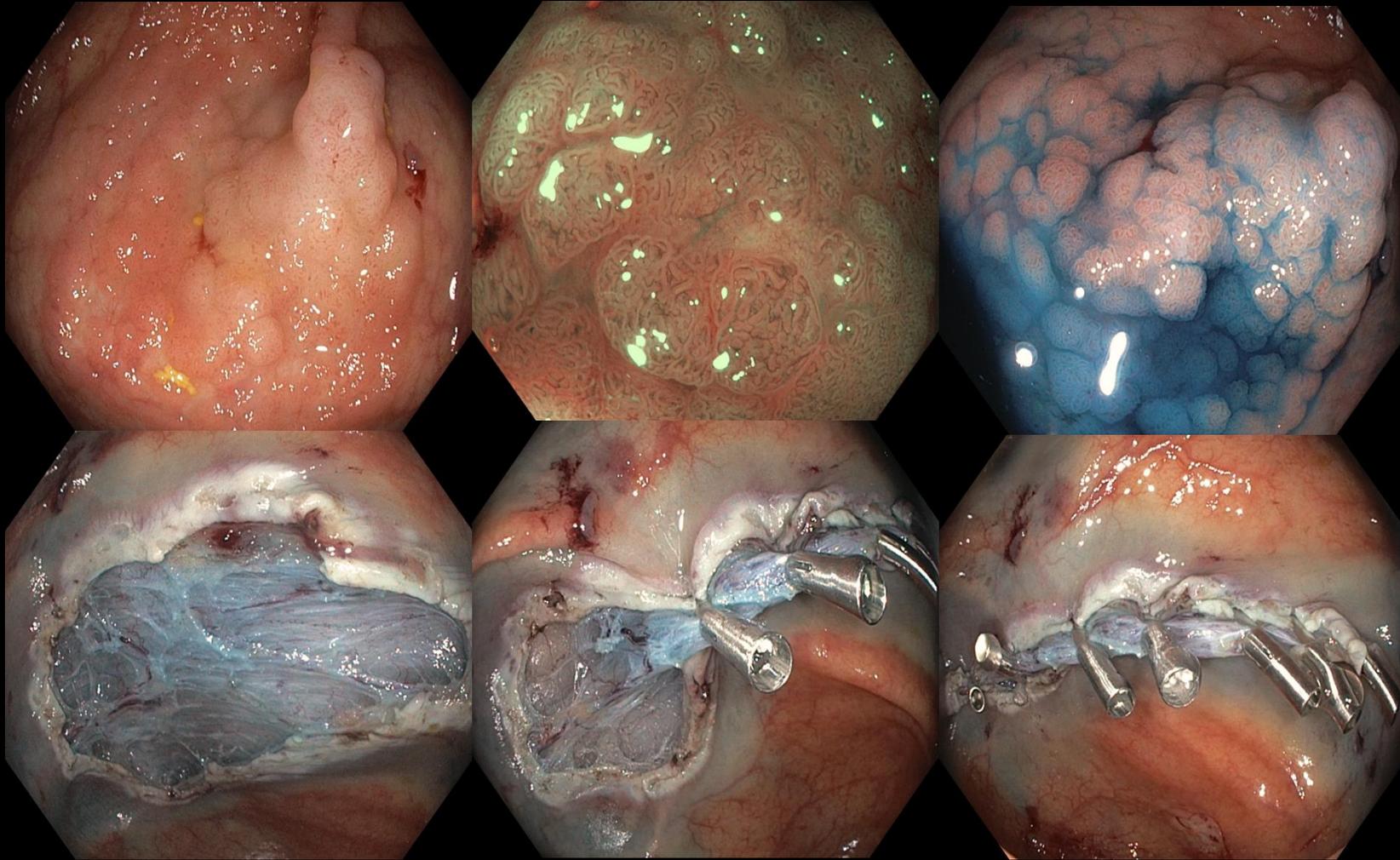
Early Identification of Muscle Injury



Perforation



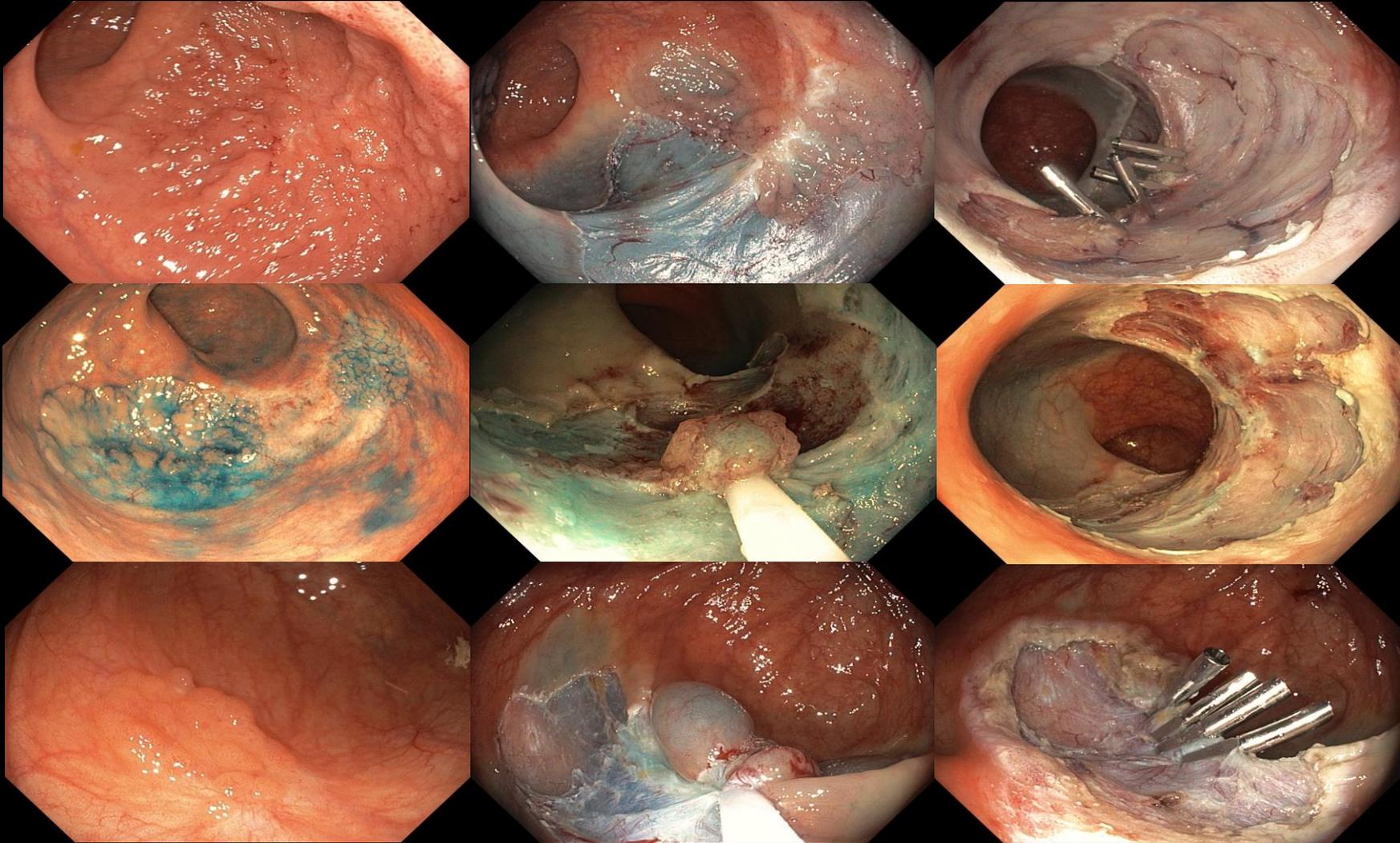
Clinically Significant Post-EMR Bleeding



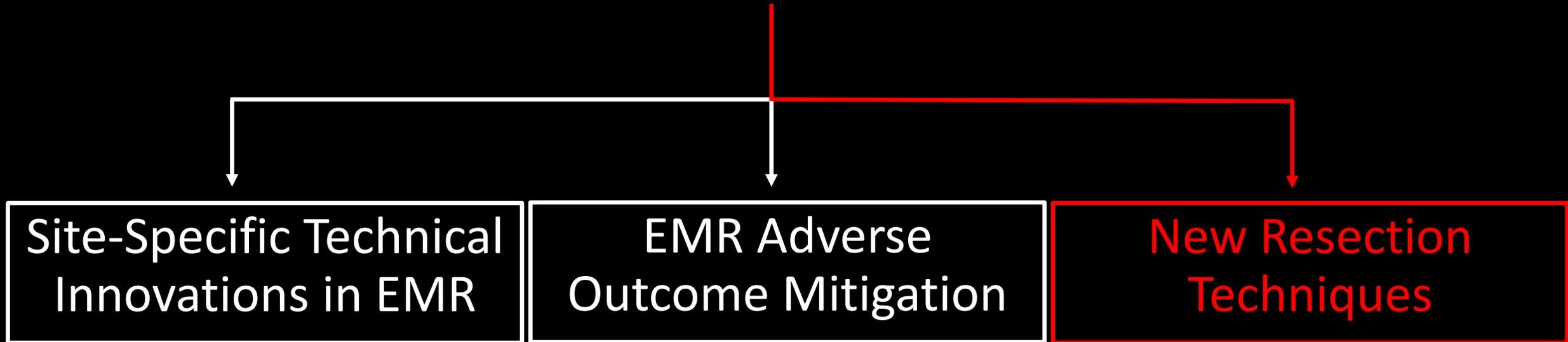
Pohl et al. Gastroenterology 2019;157:977-984

Albeniz et al. Gastroenterology 2019;157:1213-1221

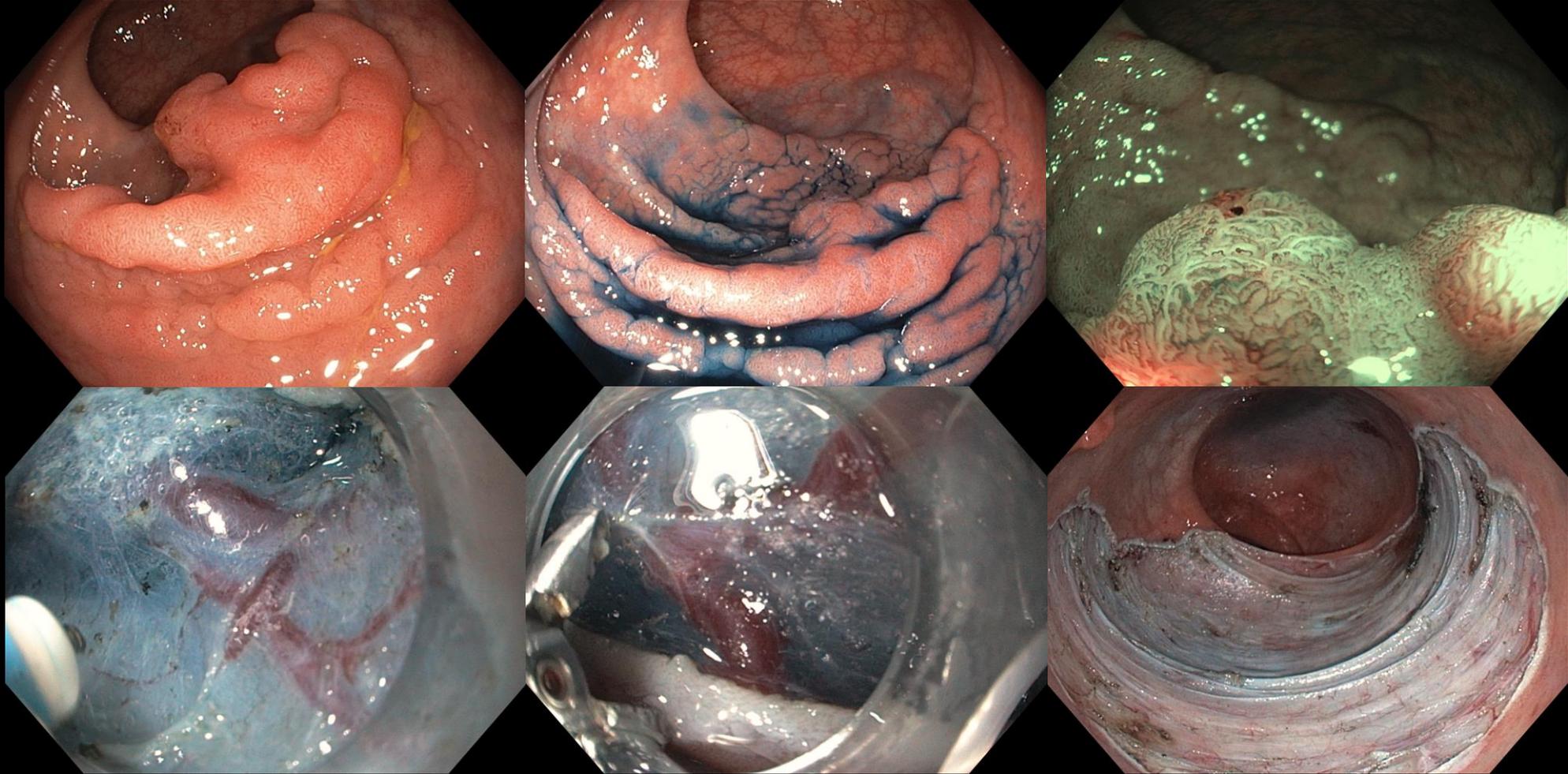
Previously Attempted/Non-lifting



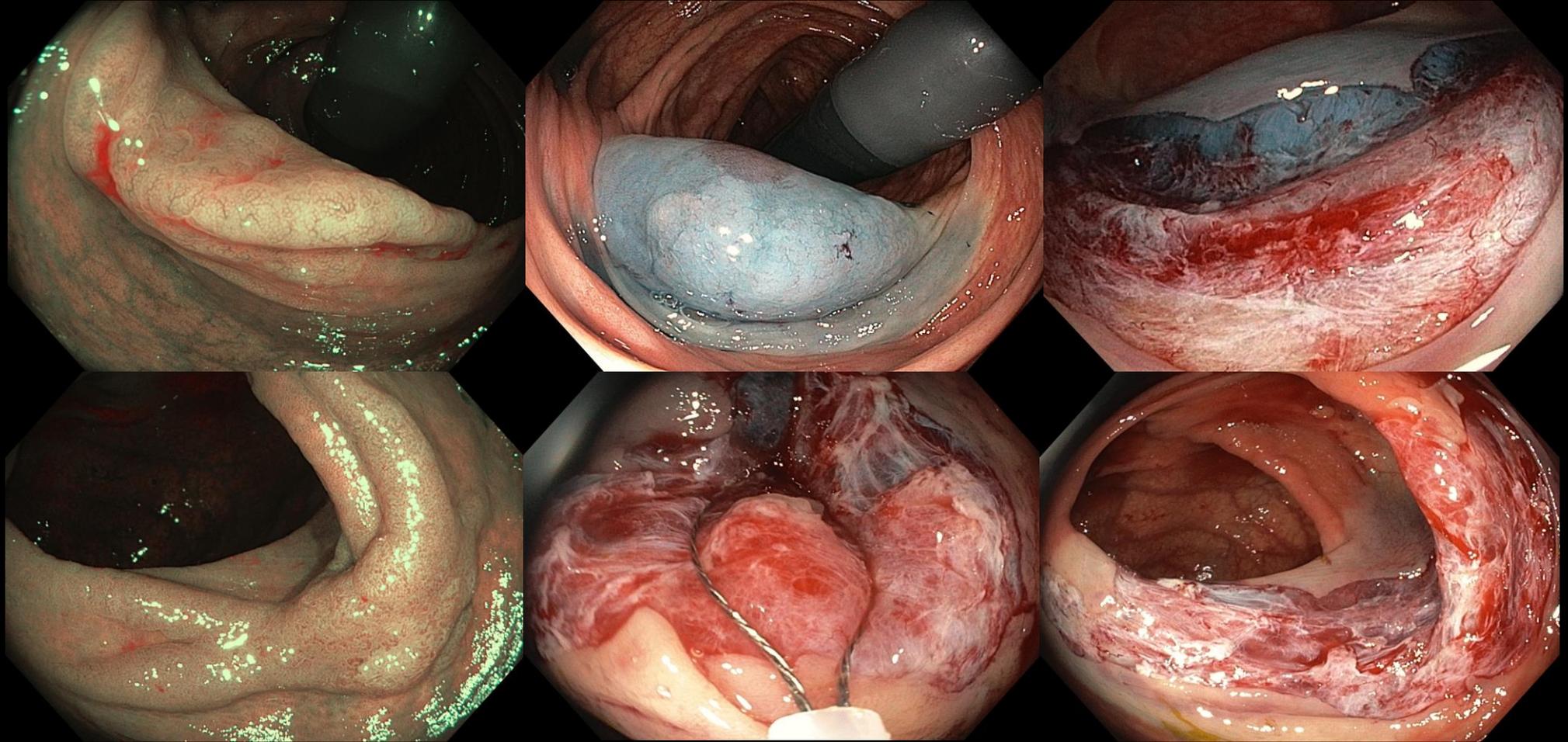
How did this come to pass...



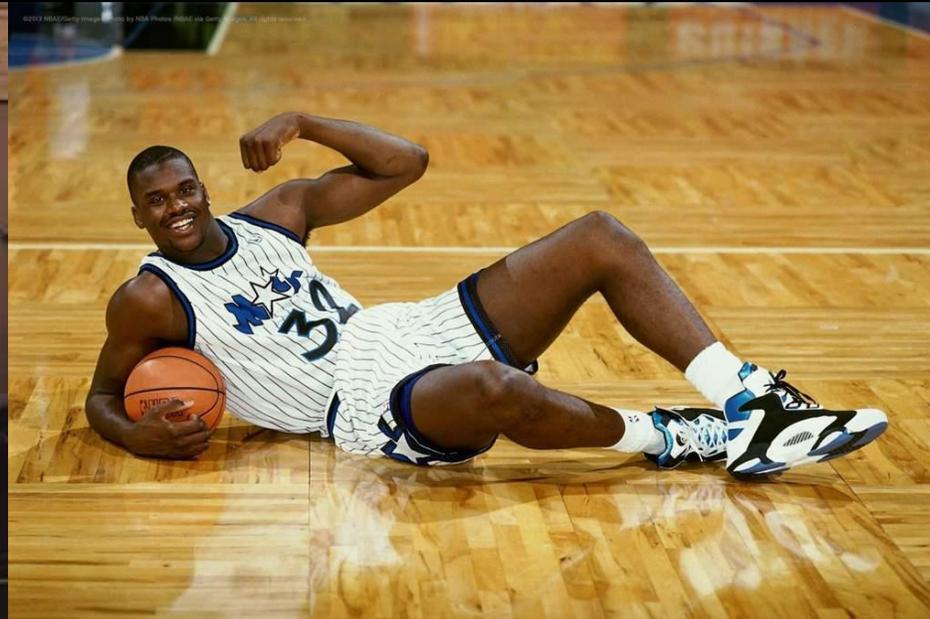
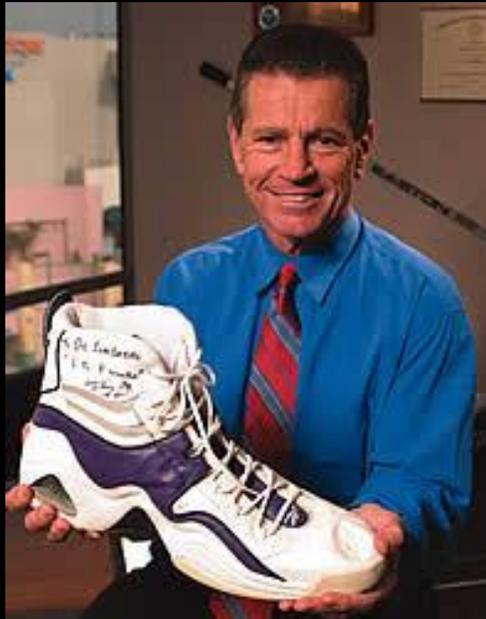
Endoscopic Submucosal Dissection (ESD)



Cold Snare Resection



Can one size, or technique, fit all..



Wide-field endoscopic mucosal resection versus endoscopic submucosal dissection for laterally spreading colorectal lesions: a cost-effectiveness analysis

Bahin et al. Gut 2018;67:1965-1973

Conclusion S-ESD is the preferred treatment strategy. However, only 43 ESDs are required per 1000 LSLs. U-ESD cannot be justified beyond high-risk rectal lesions. WF-EMR remains an effective and safe treatment option for most LSLs.

Cost Analysis of Endoscopic Mucosal Resection vs Surgery for Large Laterally Spreading Colorectal Lesions

Jayanna et al. Clin Gastroenterol Hepatol 2016;14:271-278

In a large multicenter study, endoscopic management of large LSL by EMR was significantly more cost-effective than surgery. Endoscopic management by EMR at an appropriately experienced and resourced tertiary center should be considered the first line of therapy for most patients with this disorder. This approach is likely to deliver substantial overall health expenditure savings. [ClinicalTrials.gov](https://clinicaltrials.gov/ct2/show/study/NCT01368289), Number: NCT01368289.

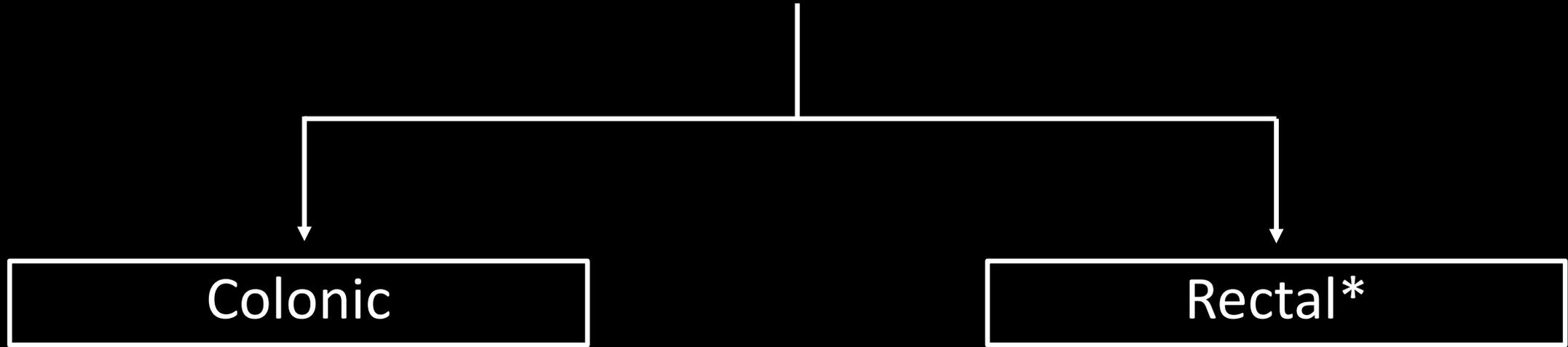


CSP/EMR

ESD/TEMS

Surgery

Step 1



- *Increased risk of cancer
- *Heightened risk of surgical morbidity
- *En bloc resection techniques available (ESD/TEMS)

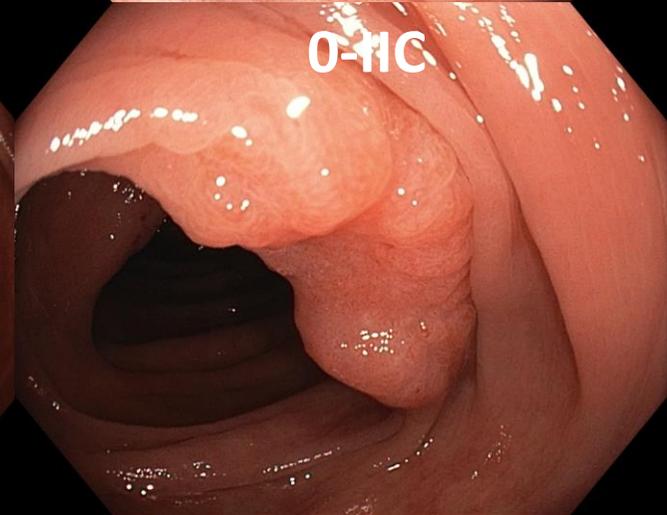
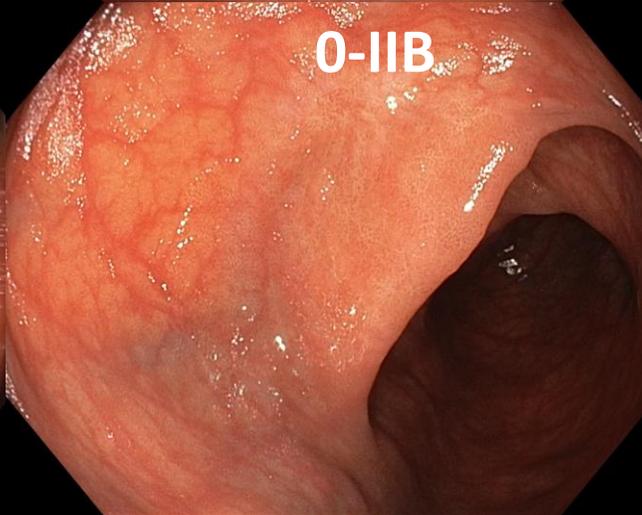
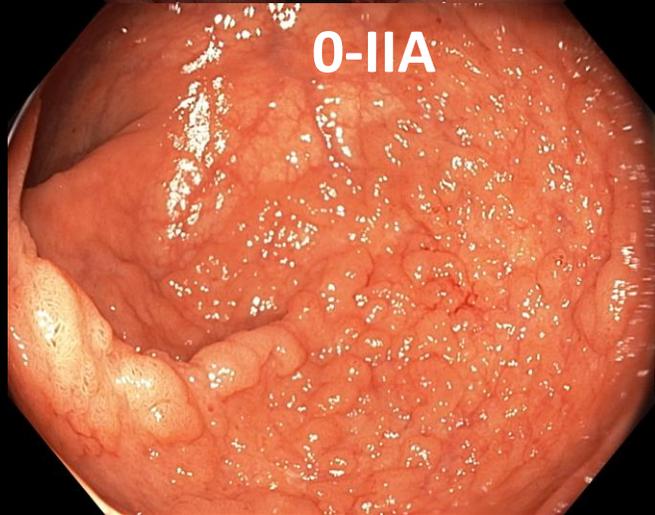
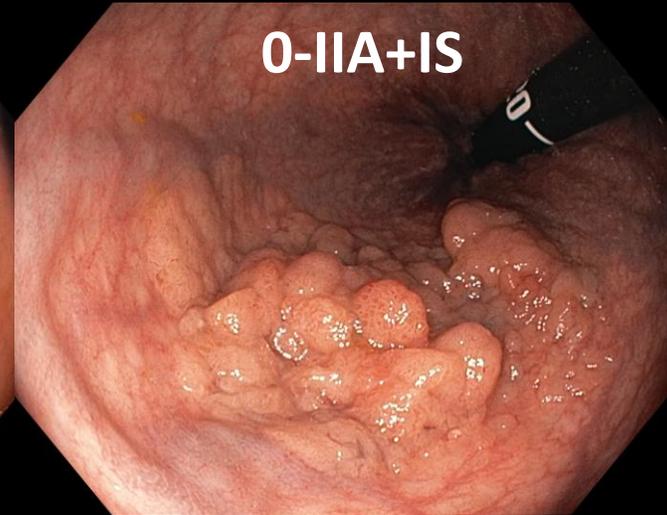
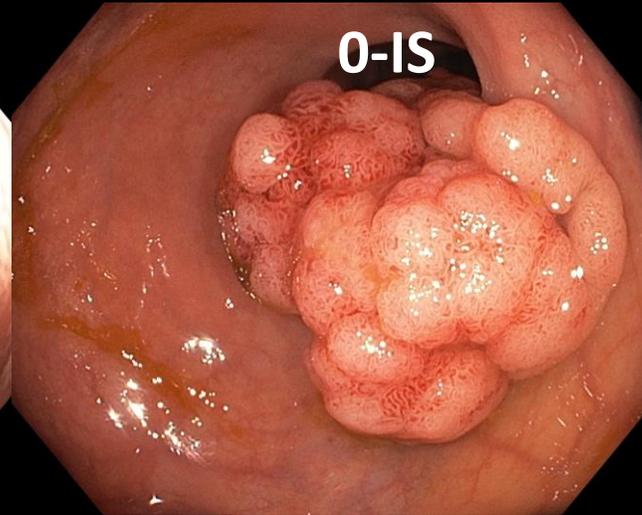
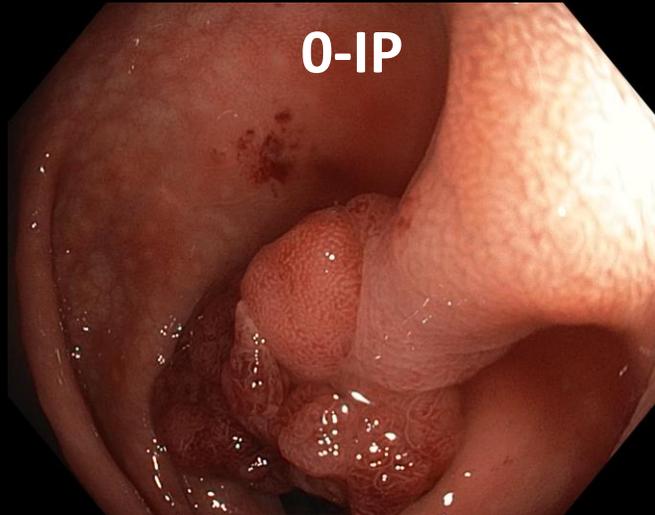
Step 2

Optical Evaluation

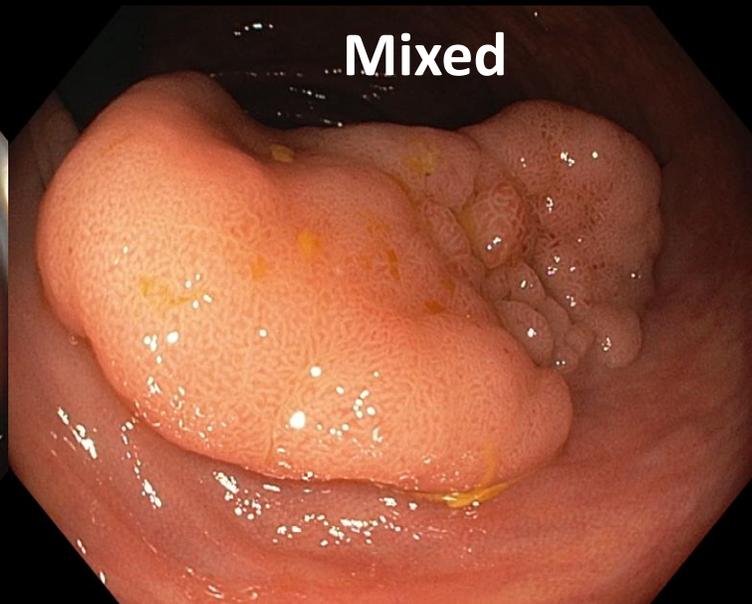
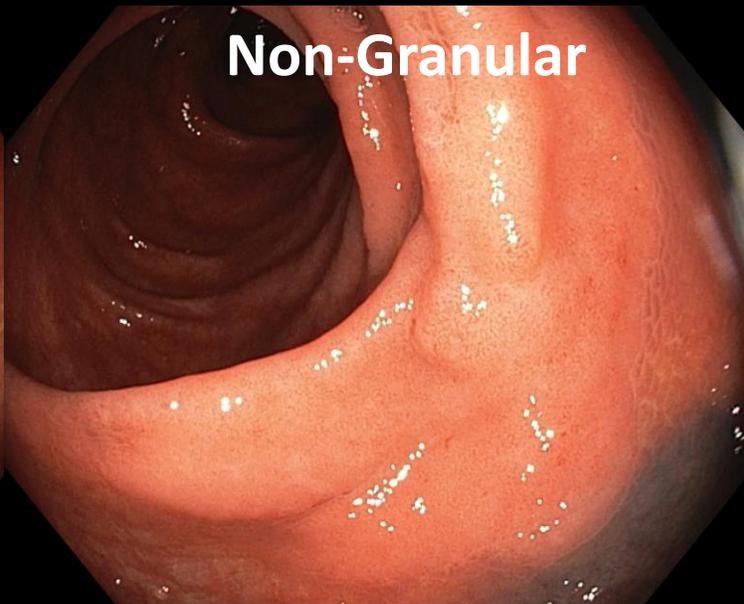
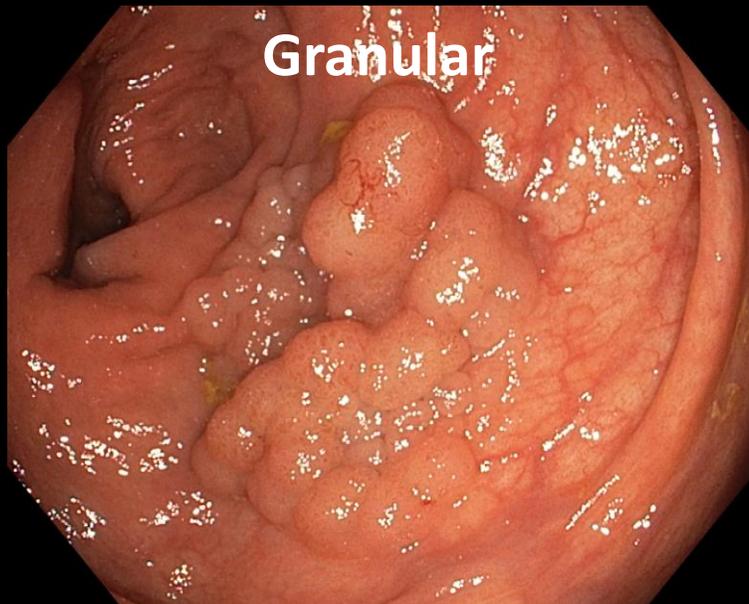
Optical Evaluation

- **Location**
- **Size**
- **Morphology**
- **Granularity**
- **Predicted Histopathology**
- **Risk of Cancer (Overt vs. Covert)**

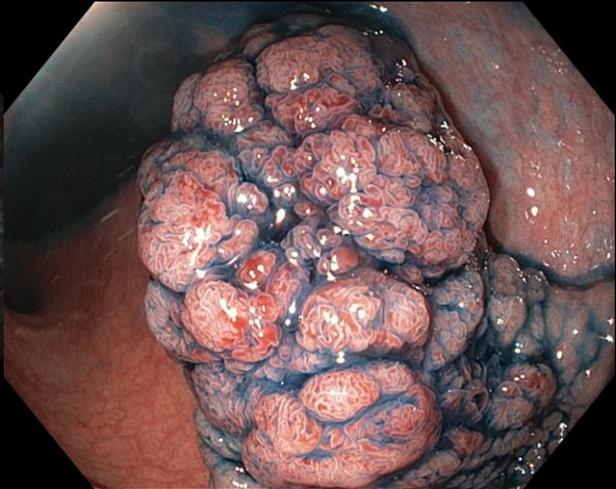
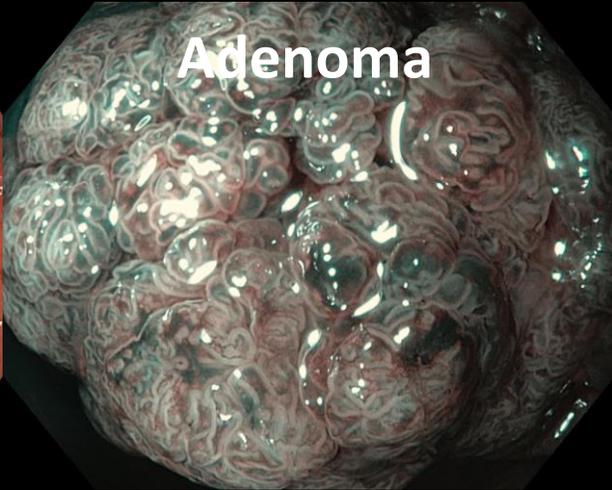
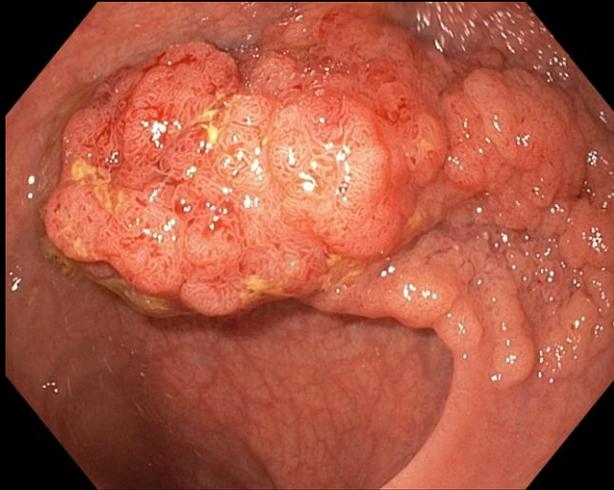
Morphology (Paris Classification)



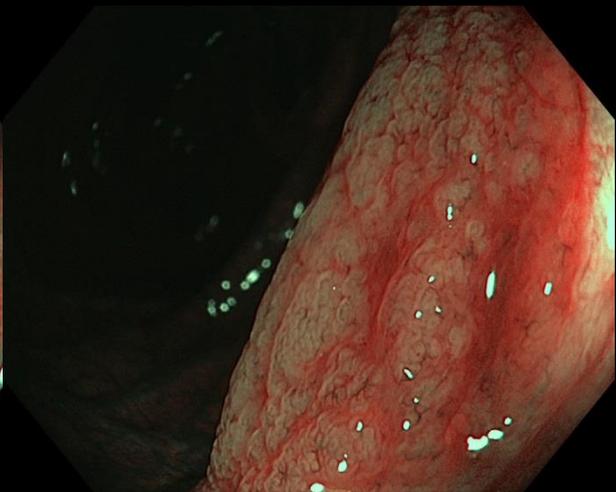
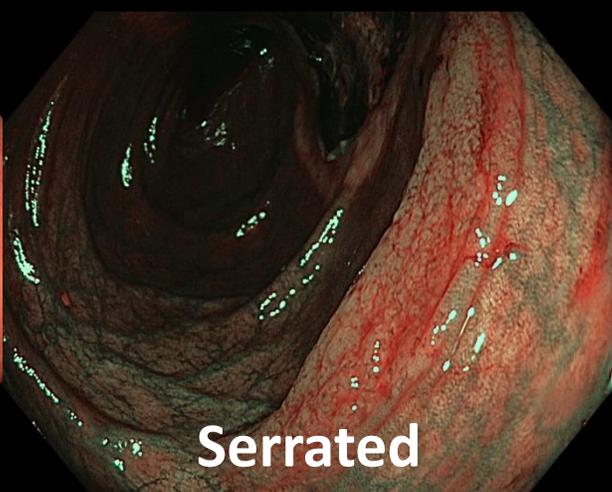
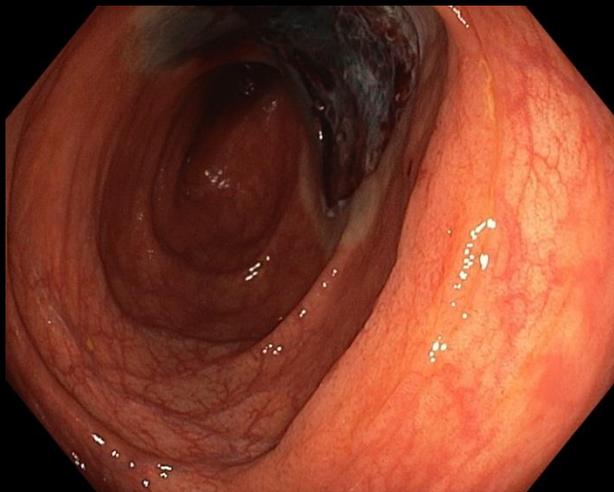
Granularity



Predicting Histopathology



VS.



Predicting Cancer



ONE MAN'S
FRUSTRATION

is another man's art

Optical Evaluation Made Easier...

Hiroshima

Jikei

NICE

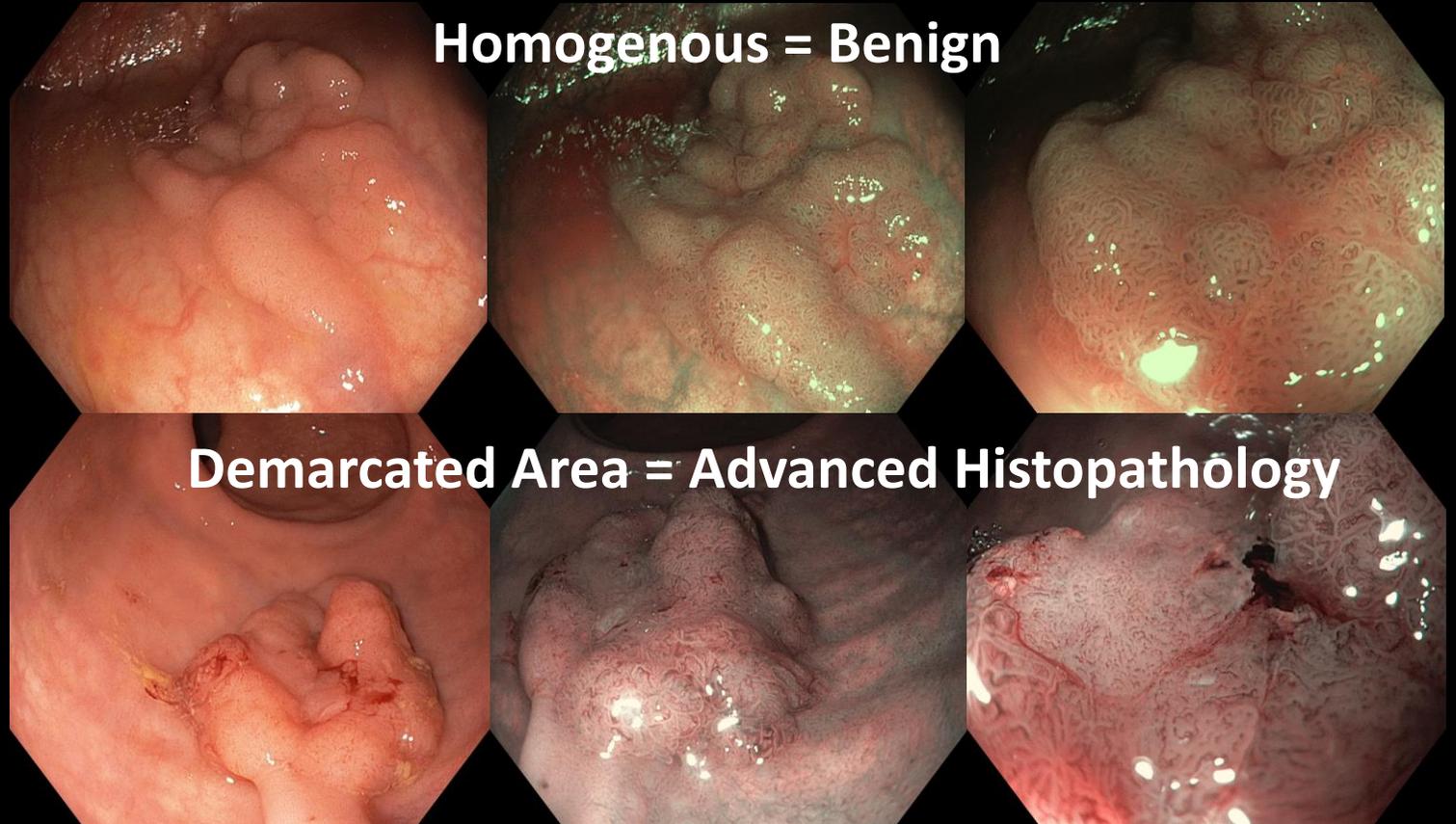
Sano

JNET

Kudo

Homogenous = Benign

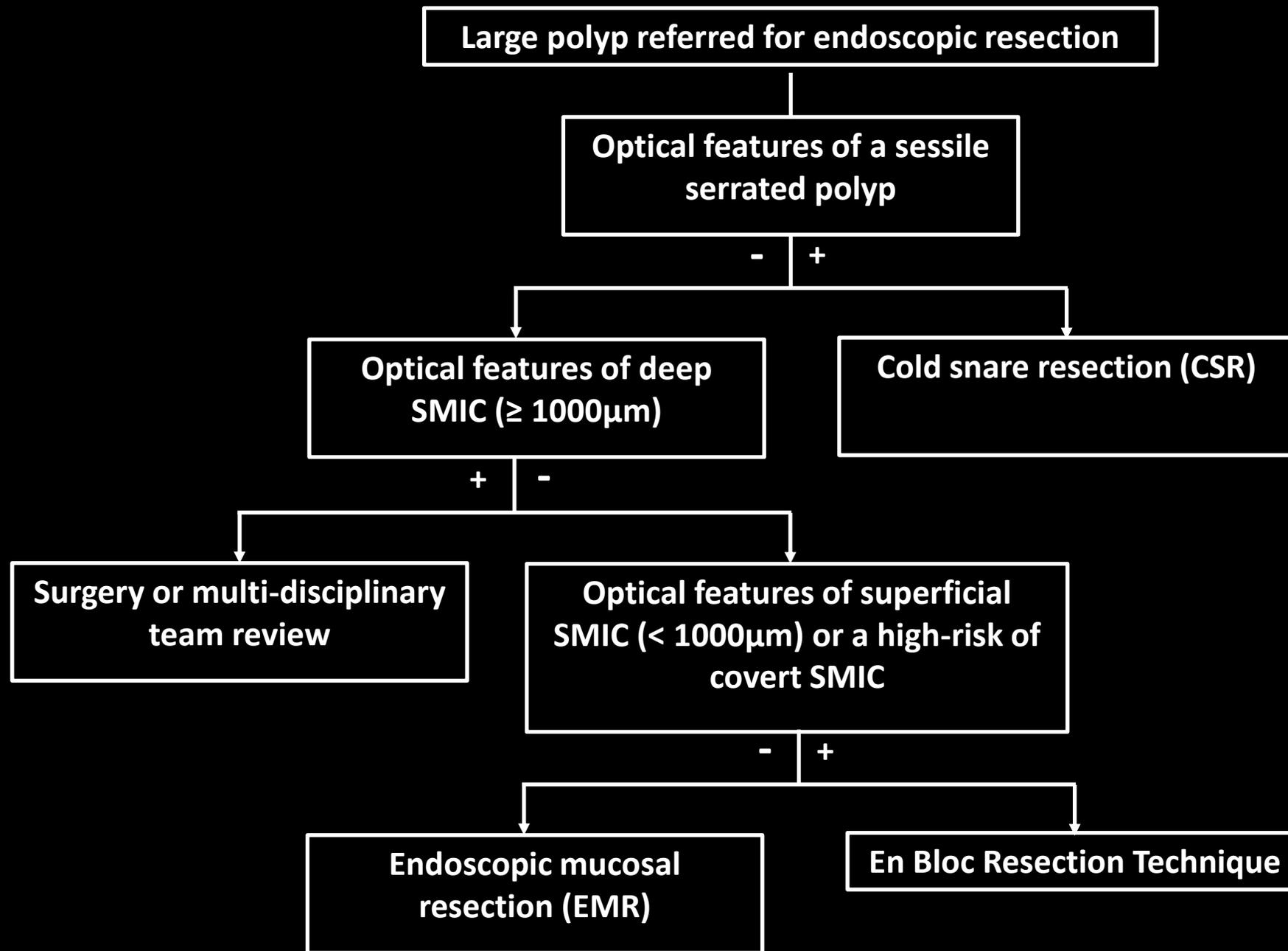
Demarcated Area = Advanced Histopathology



Invisible or "Covert" Cancer

Risk of Occult Submucosal Invasive Cancer (SMIC) According to Gross Morphology and Location
n = 1712





Thank You

