

General Guidelines (EGD-0)

FDA-approved confocal laser endoscopy, confocal miniprobe, and endocytology afford real-time *in vivo* microscopic mucosal inspection.

Since 2014 guidance was published by the ASGE Technology Committee [1], indications for endomicroscopy have expanded and refined. Accuracy is enhanced by artificial intelligence. In addition, roles for endomicroscopy outside the gastrointestinal tract are emerging.

In clinical practice today endomicroscopy facilitates identification and sampling of dysplastic cells within polypoid lesions of the stomach and colon as well as within segments of Barrett's esophagus and ulcerative colitis.[2] Also, probe-based endomicroscopy is helpful in assessing for malignancy within biliary strictures and pancreatic cystic lesions.[3,4]

While reported accuracy is very promising, most endomicroscopy and endocytology series collate results from centers of excellence performed on highly selected and often nonblinded subjects. Before the technology can be considered standard-of-care, large cohort and real world studies that compare endomicroscopy with other endoscopic imaging modalities are needed.

References

1. Confocal laser endomicroscopy. *Gastrointest Endosc* 2014; 80:928. doi: 10.1016/j.gie.2014.06.021
2. Confocal laser endomicroscopy in gastro-intestinal endoscopy: technical aspects and clinical applications. *Transl Gastroenterol Hepatol*. 2022 Jan 25;7:7. doi: 10.21037/tgh.2020.04.02
3. ASGE guideline on the role of endoscopy in the diagnosis of malignancy in biliary strictures of undetermined etiology: summary and recommendations. *Gastrointest Endosc* 2023; Volume 98, Issue 5; P685-693
4. ASGE guideline on the role of endoscopy in the diagnosis of malignancy in biliary strictures of undetermined etiology: methodology and review of evidence. *Gastrointest Endosc* 2023; Volume 98, Issue 5; P694-712.E8