

Esophageal Capsule Endoscopy (CAPEND-8)

Esophageal capsule endoscopy (ECE) provides the opportunity of visualizing esophageal mucosa under physiologic conditions without exposing the patient to radiation or sedation. PillCam ESO was approved by the FDA in 2004. ECE may be beneficial in the evaluation of esophagitis, Barrett's esophagus, esophageal cancer, and esophageal varices for patients who are unwilling or unable to have an endoscopy.

Several studies have been conducted to evaluate capsule endoscopy as a less invasive and more convenient endoscopic procedure for diagnosing GERD and BE. However, the diagnostic rates for BE were not sufficiently accurate for ECE to replace EGD as the standard diagnostic modality. Lacking the ability to obtain histological samples or perform therapeutic procedures, both of which are required during the diagnosis and surveillance of BE, is a significant limitation of ECE.

ECE was investigated as a less-invasive alternative to EGD for diagnosing esophageal varices. ECE could be an alternative to EGD in the evaluation of esophageal varices, for the screening of cirrhotic patients, and for indicating primary prophylactic treatment. It can play a role in patients with contraindications for EGD or those who refuse it. Although ECE may be beneficial for screening, unlike endoscopic treatment, including band ligation and chemical sclerotherapy, this cannot be performed with ECE.

The diagnostic yield of ECE has proven insufficient for it to replace EGD in the evaluation of esophageal diseases. Because of this, combined with its limitations, ECE is not recommended as a first-line diagnostic tool in evaluating esophageal disease.

References

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