

Colon Capsule Endoscopy (CAPEND-7)

The video colon capsule affords the benefit of visualizing colonic mucosa under physiologic conditions without exposing the patient to radiation or sedation.

The USFDA approved CCE in 2014 to detect colon polyp only in patients with incomplete colonoscopy. In 2017, the Multi-Society Task Force (MSTF) representing the American College of Gastroenterology, American Gastroenterology Association, and American Society of Gastrointestinal Endoscopy recommended CCE every 5 years as the third tier test for colon cancer screening. The ESGE also recommends CCE as a screening test for colon cancer screening in average-risk individuals when optical colonoscopy is contraindicated, vehemently opposed by the patient, or technically impossible.

Although colon capsule endoscopy (CCE) has a high level of accuracy, it is less sensitive and specific than colonoscopy in patients undergoing colorectal cancer (CRC) screening/surveillance or those with known or suspected colonic diseases.

In cases in which a previous colonoscopy was incomplete or for patients who are unable/unwilling to undergo colonoscopy, CCE has been shown to be a reasonable alternative and may be as good as or better than CT colonography in detecting significant polyps.

In addition to lower sensitivity and specificity than colonoscopy, CCE also is limited by an inability to insufflate the colon, aspirate liquids, control the transit of the CCE, and clean the mucosal surface. Patients with significant polyps on CCE also theoretically will require subsequent polypectomy, thereby requiring 2 procedures and increasing resource utilization.

Based on the higher polyp detection rate with colonoscopy and the added benefit of being able to perform polypectomy during the same procedure, it is recommended that CCE not be substituted routinely for colonoscopy. However, in patients who are unwilling or unsuitable for colonoscopy, CCE is an appropriate alternative.

In patients with inflammatory bowel disease (IBD), substituting colon capsule for colonoscopy to assess the extent and severity of disease is not recommended. CCE has been shown to underestimate the extent and severity of disease compared with colonoscopy in patients with ulcerative colitis or Crohn's Disease. Consequently, colonoscopy should remain the preferred procedure to assess active disease in patients with colitis or small bowel disease.

References

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