

## Abstract

Small bowel endoscopy is indicated for patients with an unidentified bleeding site in esophago-gastro-duodenoscopy and ileo-colonoscopy and symptoms of intestinal blood loss or unexplained anemia. In approximately two-thirds of these cases, capsule endoscopy (CE) detects a lesion within the small bowel that explains the patient's symptoms. In few cases, though, lesions outside of the small bowel might be revealed by CE. Therefore, attention to all intestines that are visualized by CE might be necessary not to overlook bleeding sites that had not been discovered by prior flexible endoscopy.

The authors present the case of a 71-year-old male patient who presented to their outpatient clinic for unexplained anemia. Small bowel CE revealed minor bleeding from an adenocarcinoma in the cecum. This article is part of an expert video encyclopedia.

## Keywords

Capsule endoscopy; Colonoscopy; Colorectal cancer; Lymphectasia; Small bowel; Video.

## Video Related to this Article

Video available to view or download at doi:10.1016/S2212-0971(13)70181-X

## Technique

Capsule endoscopy (CE).

## Materials

Capsule endoscope: PillCam™ SB2, Given Imaging EMEA, Hamburg, Germany.

## Background and Endoscopic Procedure

Esophago-gastro-duodenoscopy (EGD) and ileo-colonoscopy detects the bleeding site in approximately 80–90% of patients with signs of intestinal blood loss or unexplained anemia. Either CE or balloon enteroscopy is performed in cases of normal findings in upper and lower flexible endoscopy in patients without findings at standard endoscopy.

The authors present the case of a 71-year-old male patient who presented to their outpatient clinic for unexplained anemia with a hemoglobin drop from 12.7 to 9.3 mg/dl within 4 months. There had been no clinical signs of intestinal blood loss, and fecal occult blood testing was reported negative in three consecutive tests. EGD and ileo-colonoscopy had not resulted in any pathological findings at the referring doctor's examination.

CE was done to search for a bleeding source within the small bowel. However, CE showed normal mucosa of the small bowel but some bleeding from a neoplastic mass within

the cecum. Obviously that lesion was overlooked at the previous colonoscopy. Biopsies were taken at subsequent colonoscopy and an adenocarcinoma of the cecum was confirmed. Specimen workup after right hemicolectomy showed a pT2N0(0/27)R0cM0G2 adenocarcinoma.

## Key Learning Points/Tips and Tricks

- During evaluation of small bowel CE, attention should not be limited to the small bowel, but to the entire intestine that is visualized.
- CE might also detect bleeding sources proximal or distal to the small bowel that might have been overlooked at standard endoscopy.

## Scripted Voiceover

Capsule endoscopy was performed for unexplained anemia in a 71 year old male patient. Preceding Esophago-gastro-duodenoscopy and ileo-colonoscopy did not detect any significant finding.

Entering the duodenum, the capsule passes through a normal small bowel.

Focal lymphectasia is identified in the middle of the small bowel. This is a non-significant finding without any potential to cause bleeding.

The cecum is entered by the capsule endoscope. Visualization of the colon mucosa is suboptimal as there was no adequate preparation regimen applied for investigation of the colon.

Nevertheless, a minor bleeding is doubtlessly identified shortly after pass of Bauhin's valve. A neoplastic mass seems origin of the bleeding.

Colonoscopy was repeated and revealed an excavating lesion in the cecum, with histopathology confirming adenocarcinoma of the colon.

This article is part of an expert video encyclopedia. Click here for the full [Table of Contents](#).

### Further Reading

- Albert, J. G.; Schulbe, R.; Hahn, L.; *et al.* Impact of Capsule Endoscopy on Outcome in Mid-Intestinal Bleeding: A Multicentre Cohort Study in 285 Patients. *Eur. J. Gastroenterol. Hepatol.* **2008**, *20*, 971–977.
- Riccioni, M. E.; Urgesi, R.; Spada, C.; *et al.* Unexplained Iron Deficiency Anaemia: Is it Worthwhile to Perform Capsule Endoscopy? *Dig. Liver Dis.* **2010**, *42*, 560–566.