Terminal lleitis in Crohn's Disease Is Detected by Capsule Endoscopy



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Abstract

This is an example of capsule endoscopy (CE) revealing terminal ileitis in an young male patient with recurrent abdominal pain who had previously been investigated with colonoscopy and esophagogastroduodenoscopy without any significant findings. CE revealed severe inflammation of the terminal ileum. This article is part of an expert video encyclopedia.

Keywords

Capsule endoscopy; Crohn's disease; Terminal ileitis; Video.

Video Related to this Article

Video available to view or download at doi:10.1016/S2212-0971(13)70123-7

Technique

Capsule endoscopy (CE).

Material

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

Background and Endoscopic Procedure

CE has a high sensitivity and a high negative predictive value for detecting small bowel Crohn's disease. In comparison to cross-sectional imaging with magnetic resonance imaging and computed tomography, small-bowel lesions proximal to the terminal ileum are more accurately visualized by CE. The terminal ileum is the bowel segment that is most frequently involved in cases when surgical resections are necessary.

Before CE, small bowel lavage is performed. To this end, patients are required to ingest 1 l of polyethylene glycol the evening before and another liter the day of the procedure. Approximately 10 min before ingesting the capsule, 80 mg of simethicon are offered to the patient.

Key Learning Points/Tips and Tricks

- CE is highly sensitive in detecting small bowel Crohn's disease.
- Sensitivity of CE might be higher than ileo-colonoscopy to detect terminal ileitis.
- Limitation of use of CE in Crohn's disease is high-grade stenosis of the intestinal tract.
- In patients without endoscopic or clinical suspicion of stenosis, CE could be the first-line modality for detection of small bowel Crohn's disease beyond the reach of the colonoscope.

This article is part of an expert video encyclopedia. Click here for the full Table of Contents.

Complications and Risk Factors

Patency capsule may prevent capsule retention, and passage of an intact patency capsule might predict uneventful passage of the video capsule endoscope.

Scripted Voiceover

Time (min:sec)	Voiceover text
0:00	Capsule endoscopy is performed in a 29 year old male patient for anemia and recurring abdominal pain.
0:06	The duodenal bulb is entered by the capsule endoscope. Thereby, some minor erosions are visualized.
0:20	About one hour later, normal small bowel mucosa is revealed by the capsule endoscope.
0:40	Another one and half hours later, the capsule already reaches the distal third of the small bowel. Increasingly pronounced, edema, erosions, aphthous lesions and ulcers are depicted over a long small bowel segment.
1:01	Chyme and secretions are retained before this inflammatory stenosis of the terminal ileum.
1:27	The capsule arrives at the cecum. The colonic mucosa appears completely normal.

Further Reading

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