Medtronic

Clinical summary

ACG clinical guideline: diagnosis and management of small bowel bleeding

Lauren Gerson (Division of Gastroenterology, California Pacific Medical Center and Department of Medicine, University of California School of Medicine, San Francisco, CA, US)

Background and aims

The ACG guideline for small bowel bleeding aims to provide clinical definition of small bowel bleeding, review the diagnostic modalities (including video capsule endoscopy (VCE), endoscopic evaluation, and radiographic modalities), and provide treatment options including endoscopic, medical and surgical options.

- Obscure GI hemorrhage (OGIB) is proposed to be reclassified as small bowel bleeding and OGIB to be used for patients without a source of bleeding after a comprehensive evaluation of the small bowel.
- After the introduction of VCE (2001) and deep enteroscopy (2004) in the US, approximately 75% of OGIB cases were found to have small bowel sources of bleeding.

This summary focuses on endoscopic visualization of the small intestine as covered in the ACG Clinical Guideline.

Key Points for Video Capsule Endoscopy

- Diagnostic recommendation includes VCE as a first-line procedure for small bowel evaluation after upper and lower GI sources have been excluded, including second-look endoscopy when indicated.
- VCE is recommended before deep enteroscopy to increase diagnostic yield.

Clinical Summary: Gerson, L. B., Fidler, J. L., Cave, D. R., & Leighton, J. A. (2015). ACG Clinical Guideline: Diagnosis and Management of Small Bowel Bleeding. The American Journal of Gastroenterology, 110(9), 1265-1287. <u>https://doi.org/10.1038/ajg.2015.246</u> US-DG-2200018 ©2022 Medtronic.

- VCE allows for visualization of the small bowel in up to 90% of patients with a diagnostic yield between 38 and 83%.
- VCE provides higher diagnostic yields than deep enteroscopy for patients with overt bleeding
 The diagnostic yield of VCE provides more positive findings in patients with low Hemoglobin (<10 mg/dl), longer duration of bleeding, more than one episode of bleeding, and conducted within 48 to 72 hours of the overt suspected small bowel bleeding episode.
- VCE is well tolerated by patients, the main complication is capsule retention, which occurs most frequently in Crohn's Disease patients. Perforation is a very rare complication.

Key points for deep enteroscopy

- Double-balloon enteroscopy (DBE) is advantageous because it offers both diagnostic and therapeutic capabilities.
- Diagnostic yield of DBE ranges from 60% to 80%, and successful therapeutic interventions ranges from 40-73% of patients.
- Complication rates for diagnostic DBE are primarily pancreatitis and perforation (<1%).
- Initial studies of Single-Balloon enteroscopy (SBE) indicate small bowel diagnostic rates range from 30% to 74% and no complications were reported related to the diagnostic procedure.
- Spiral enteroscopy demonstrated diagnostic yields from 33% to 57% and had a low complication rate.
- Intraoperative enteroscopy is recommended only for patient presenting with recurrent bleed requiring transfusions or hospitalizations after negative evaluation by VCE or deep enteroscopy or in patients where deep enteroscopy cannot be performed without lysis adhesions.

Core tips

- Meta-analysis of VCE and push enteroscopy studies showed VCE had a greater yield for clinically significant findings (56% vs 26%) for patients with small bowel bleeds.
- Multiple meta-analyses comparing VCE and DBE for patients with a majority of suspected small bowel bleeding showed comparable diagnostic yield (60% vs 57%).
- VCE is a useful screening tool prior to DBE in patients with suspected small bowel bleeds, and demonstrated improvement in diagnostic and therapeutic yield, and also informs the route of DBE.
- In patients where there is high clinical suspicion of an SB lesion but resulted in negative VCE, DBE should still be completed, including the consideration of total enteroscopy.

Clinical Summary: Gerson, L. B., Fidler, J. L., Cave, D. R., & Leighton, J. A. (2015). ACG Clinical Guideline: Diagnosis and Management of Small Bowel Bleeding. The American Journal of Gastroenterology, 110(9), 1265-1287. <u>https://doi.org/10.1038/ajg.2015.246</u>
 US-DG-2200018 ©2022 Medtronic.