Communication from the ASGE Standards of Practice Committee

GUIDELINE

The role of endoscopy in the management of constipation

This is one of a series of statements discussing the use of GI endoscopy in common clinical situations. The Standards of Practice Committee of the American Society for Gastrointestinal Endoscopy (ASGE) prepared this guideline. In preparing this document, MEDLINE databases were used to search for publications pertaining to this topic between January 1990 and December 2013. Additional references were obtained from the bibliographies of the identified articles and from recommendations of expert consultants. When few or no data exist from well-designed, prospective trials, emphasis was given to results from large series and reports from recognized experts. The reported evidence and recommendations on the basis of reviewed studies were based on consensus opinion of the strength of the supporting evidence (Table 1).[1] The strength of individual recommendations is based on both the aggregate evidence quality and an assessment of the anticipated benefits and harms. Weaker recommendations are indicated by phrases such as "We suggest…," whereas stronger recommendations are typically stated as "We recommend…."

ASGE guidelines for the appropriate use of endoscopy are based on a critical review of the available data and expert consensus at the time that the documents are drafted. Further controlled clinical studies may be needed to clarify aspects of this document. This document may be revised as necessary to account for changes in technology, new data, or other aspects of clinical practice and is solely intended to be an educational device to provide information that may assist endoscopists in providing care to patients. This document is not a rule and should not be construed as establishing a legal standard of care or as encouraging, advocating, requiring, or discouraging any particular treatment. Clinical decisions in any particular case involve a complex analysis of the patient's condition and available courses of action. Therefore, clinical considerations may lead an endoscopist to take a course of action that varies from the recommendations and suggestions proposed in this document.

INTRODUCTION AND EPIDEMIOLOGY

Constipation is a common symptom affecting 2% to 27% of the population and resulting in about 2.5 million physician visits in the United States annually.[2,3] The prevalence of constipation is higher in women than in men[4] and increases with age.[5] Low socioeconomic status, physical inactivity, a history of sexual abuse, and depression have all been reported to be risk factors for constipation.[6]

DEFINITION

Chronic constipation has been defined by the Rome III diagnostic criteria (Table 2).[7] Constipation symptoms include excessive straining, discomfort at defecation, or passage of hard or pellet-like stools, even though the frequency of defecation may be normal.

THE ROLE OF ENDOSCOPY

Patients with constipation should undergo colonoscopy if they have rectal bleeding, heme-positive stool, iron deficiency anemia, weight loss, or obstructive symptoms. In addition, colonoscopy should be considered in selected patients to exclude obstruction from cancer, stricture, and extrinsic compression. Colonoscopy also should be done prior to surgery for constipation. In younger patients, a flexible sigmoidoscopy may be sufficient to exclude distal disease. Suspected Hirschsprung's disease requires anorectal manometry and deep biopsy to examine for the absence of myenteric neurons.[8-10]

Patients aged >50 years who have not had prior colorectal cancer screening should undergo colonoscopy. Studies evaluating the association of chronic constipation and colorectal cancer have produced inconsistent findings. Chronic constipation was associated with an increased risk of colon cancer in two U.S. population–based retrospective studies[11,12] but not in a prospective study of female nurses.[13] A retrospective study from Australia also reported increased cancer risk in patients with constipation,[14] and a retrospective study from Japan found increased risk in those who used laxatives frequently.[15] However, a meta-analysis of 28 studies (8 cross-sectional surveys, 3 cohort studies, 17 case-control studies) demonstrated no increase in colorectal cancer in patients with chronic constipation.[16]

The yield of colonoscopy in isolated constipation is low and comparable to that of asymptomatic patients undergoing colonoscopy for colorectal cancer screening. In one study of 563 sigmoidoscopies or colonoscopies done for the evaluation of constipation, colorectal cancer was found in 8 (1.4%), adenomas in 82 (14.6%), and advanced

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TABLE 1. GRADE system[1] for rating the quality of evidence for guidelines*

Quality of evidence	Definition	Symbol
High quality	Further research is very unlikely to change our confidence in the estimate of effect.	⊕⊕⊕⊕
Moderate quality	Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.	⊕⊕⊕◯
Low quality	Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.	⊕⊕◯◯
Very low quality	Any estimate of effect is very uncertain.	⊕◯◯◯

GRADE, Grading of Recommendations Assessment, Development, and Evaluation.
*Adapted with permission from Guyatt et al.[1]

TABLE 2. Rome III criteria for functional constipation[7]

Criteria fulfilled for the previous 3 months, with symptom onset ≥6 months prior to diagnosis:
1. Must include ≥2 of the following:
a. Straining during at least 25% of defecations
b. Lumpy or hard stools in at least 25% of defecations
c. Sensation of incomplete evacuation for at least 25% of defecations
d. Sensation of anorectal obstruction/blockage for at least 25% of defecations
e. Manual maneuvers to facilitate at least 25% of defecations
f. Fewer than 3 defecations per week
2. Loose stools are rarely present without the use of laxatives.
3. Insufficient criteria for irritable bowel syndrome.

lesions (cancer or adenoma with malignancy, high-grade dysplasia, villous features, or size >10 mm) in 24 (4.3%).[17] Another study that evaluated the yield of colonoscopy performed for the sole indication of constipation found that the prevalence of colorectal neoplasia was lower in patients with constipation than in those undergoing colonoscopy for routine colorectal cancer screening.[18] A retrospective review of 41,775 index colonoscopies performed for colorectal cancer screening, constipation alone, or constipation with another indication found that patients with constipation alone had a lower risk of significant findings than patients undergoing colonoscopy for average-risk screening.[19] Associated findings may include solitary rectal ulcer syndrome (indicating rectal prolapse), anal fissure, and melanosis coli (indicating chronic laxative use).

Colonoscopy may be used to provide therapy in some patients. Fibrotic strictures from inflammatory bowel disease, surgery, or ischemia can be dilated at the time of colonoscopy.[20-23] Percutaneous endoscopic cecostomy or colostomy has been used with favorable results in children with severe refractory constipation caused by conditions such as neurogenic bowel.[24,25] In adults with acute colonic pseudo-obstruction and neurogenic bowel, percutaneous endoscopic cecostomy may be effective when conservative treatment fails.[26] It is important to understand that colonoscopy has no role in stool disimpaction, although there are reports of colonoscopic removal of bezoar-induced fecal impaction.[27]

Chronic constipation is an independent risk factor for inadequate bowel preparation for colonoscopy.[28] In these patients, a more aggressive regimen for colon cleansing should be considered.

SUMMARY

1. We recommend that GI endoscopy should not be performed in the initial evaluation of patients presenting with symptoms of chronic constipation in the absence of alarm features or suspicion of organic GI disease. ⊕⊕⊕◯
2. We recommend that patients with constipation undergo colonoscopy to exclude organic disease if they have rectal bleeding, heme-positive stool, iron deficiency anemia, or weight loss prior to surgical therapy for chronic constipation. ⊕⊕⊕⊕
3. We recommend that patients aged >50 years presenting with constipation who have not previously had colon cancer screening should have a colonoscopy. ⊕⊕⊕⊕
4. We recommend colonoscopy to allow dilation of benign colon strictures and creation of percutaneous cecostomy when clinically appropriate and feasible. ⊕⊕⊕◯

DISCLOSURES

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