JAMA Clinical Guidelines Synopsis

Evaluation and Treatment of Patients With Constipation

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GUIDELINE TITLE American Gastroenterological Association Medical Position Statement on Constipation

DEVELOPER American Gastroenterological Association (AGA) Institute Medical Position Panel

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PRIOR VERSION May 21, 2000

FUNDING SOURCE AGA Institute

TARGET POPULATION Adults with chronic constipation

MAJOR RECOMMENDATIONS An algorithmic treatment approach is recommended.[1] For clinical assessment of constipation, if feasible, discontinue medications that can cause constipation before further testing (strong recommendation, low-quality evidence). A digital rectal examination including assessment of pelvic floor motion during simulated evacuation should be performed before referral for anorectal manometry (strong recommendation, moderate-quality evidence).

Tests to assess for medical causes of chronic constipation

- In the absence of other indications, only a complete blood cell count is needed (strong recommendation, low-quality evidence); metabolic tests (glucose, calcium, thyrotropin) are not recommended for chronic constipation alone (strong recommendation, moderate-quality evidence).
- Colonoscopy is not advised in patients lacking alarm features if they are current with age-appropriate colon cancer screening (strong recommendation, moderate-quality evidence).
- Anorectal manometry and a rectal balloon expulsion should be performed in patients who do not respond to laxatives (strong recommendation, moderate-quality evidence).
- Defecography should be considered when results of anorectal manometry and rectal balloon expulsion are inconclusive for defecatory disorders (strong recommendation, low-quality evidence).
- Colonic transit should be evaluated if anorectal test results do not show a defecatory disorder or if symptoms persist despite treatment of a defecatory disorder (strong recommendation, low-quality evidence).

Initial treatment approach

- After addressing medications that may cause constipation and performing clinically guided tests, a therapeutic trial (ie, fiber supplementation, osmotic or stimulant laxatives) is recommended before anorectal testing (strong recommendation, moderate-quality evidence).
- Normal-transit constipation (NTC) and slow-transit constipation (STC) can be safely managed with long-term use of laxatives (strong recommendation, moderate-quality evidence).
- Pelvic floor retraining by biofeedback rather than laxatives is recommended for defecatory disorders (strong recommendation, high-quality evidence).

Summary of the Clinical Problem

Constipation occurs in approximately 12% to 19% of the population[1] and increases with age, especially after 60 years. Constipation is a common problem in outpatient practices and a frequent reason for admission to the hospital[2] and thus is associated with significant adverse effects on quality of life and health care expenditures. Chronic constipation is defined as presence for more than 3 to 6 months of 2 or more of the following symptoms: decreased stool frequency, straining, hard stools, sensation of incomplete emptying or anorectal blockage, requirement for manual maneuvers to pass stool, and rare loose stools in the absence of laxative use.[3] Unlike chronic constipation, constipation-predominant irritable bowel syndrome (IBS-C) presents as recurrent abdominal pain or discomfort associated with hard or infrequent stools or relieved by defecation. There are 3 categories of chronic constipation: disorders of defecation (dyssynergy), STC, and NTC. Defecatory disorders can occur with either STC or NTC. Most patients can be treated without extensive testing. Systemic conditions and medications that aggravate constipation should be addressed.[4] Diet, fluids, nonprescription medications, fiber supplements, osmotic agents, and stimulant cathartics can be effective but may challenge adherence. Refractory cases require specific testing and specialist referral. New drugs with novel mechanisms of action have shown promise.[5,6] Biofeedback typically is recommended for defecatory disorders. Colorectal surgery is a last resort.

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Characteristics of the Guideline Source

The AGA Institute Clinical Practice and Quality Management Committee (CPQMC) selected the authors and external reviewers for the technical review (**Table**). Authors were vetted for potential conflicts of interest in accordance with AGA policy; several reported potential conflicts of interest from relationships with companies associated with development of new medications for constipation or anal manometry technology. All 3 authors of the technical review were faculty members at the Mayo Clinic, which also reported a fi-

Table. Guideline Rating

Rating Standard	Rating
Establishing transparency	Good
Management of conflict of interest in the guideline development group	Poor
Guideline development group composition	Poor
Clinical practice guideline–systematic review intersection	Good
Establishing evidence foundations and rating strength for each guideline recommendation	Fair
Articulation of recommendations	Good
External review	Fair
Updating	Fair
Implementation issues	Fair

nancial interest in anal manometry technology. The final draft of the guideline was posted online for public comment and approved by the AGA Institute Governing Board prior to publication.

Evidence Base

The AGA CPQMC and council section members developed focused clinical questions. PICO (population, intervention, comparison, outcome) tables were constructed using evidence from a broad review of the literature. Systematic reviews were emphasized, with updating of outdated reviews. The technical review was drafted under the direction of a methodologist who created GRADE evidence profiles for each clinical question.

Benefits and Harms

The guideline's structured, evidence-based approach could improve the quality of care provided and outcomes for patients with chronic constipation by simplifying the initial evaluation, emphasizing empirical therapy, and restricting complex and expensive testing to refractory cases. However, the anorectal and colonic testing recommended for patients who do not respond to initial therapy may be available only at specialized centers. Similarly, access to and insurance coverage for biofeedback for pelvic floor retraining may be limited.[7] Clinical trials of the new intestinal secretagogues, lubiprostone[5] and linaclotide,[6] are encouraging, but long-term safety and incremental value over current therapy is uncertain and they are expensive, with variable insurance coverage.

Discussion

Adherence to the guideline has the potential to standardize care and reassure physicians and patients. Differentiating idiopathic chronic constipation from IBS-C can be difficult. The guideline did not address therapy for IBS-C. The recommendations for stopping constipating medications and limiting blood tests to selected patients are reasonable, even if strong supporting evidence is lacking. However, the discordance between the guideline's strong recommendation for and the low quality of evidence supporting anorectal and colonic transit testing is worth noting. Although individual recommendations in the guideline have been studied, the algorithm's effect on longer-term patient outcomes has not been tested.

The American College of Gastroenterology (ACG) has published a monograph focused on medical treatment. Its recommendations for fiber, osmotic agents, stimulant laxatives, intestinal secretagogues, and biofeedback were similar to those promulgated by the AGA position statement.

Areas in Need of Future Study or Ongoing Research

The authors did not comment on treatment of chronic constipation in nursing home residents, opioid-induced constipation, or alternative therapies. Because generalist physicians and other clinicians who treat patients with chronic constipation will use the guideline, a recommendation on when it is appropriate to refer to a specialist would be useful. Whether the guideline's recommendations apply equally to subgroups based on symptom categories, age, sex, or ethnicity deserves study. Additional precision regarding the value of diet, fluids, exercise, the timing of meals and toileting, and over-the-counter medications such as bisacodyl, milk of magnesia, propylene glycol, lactulose, and senna would be valuable; for instance, docusate has been shown to be inferior to psyllium.[4] How these approaches compare with the newer drugs is uncertain. Additional studies of behavioral patient education, biofeedback, and surgery are necessary.[8] Cost-effectiveness analyses are warranted.

Related guidelines

ACG Monograph on the Management of Irritable Bowel Syndrome and Chronic Idiopathic Constipation

ACG Clinical Guideline: Management of Benign Anorectal Disorders

American Gastroenterological Association Technical Review on Constipation

ARTICLE INFORMATION

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Conflict of Interest Disclosures: The authors have completed and submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest and none were reported.

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