General

Guideline Title
American Gastroenterological Association medical position statement on constipation.

Bibliographic Source(s)

Guideline Status
This is the current release of the guideline.


According to the guideline developer, the Clinical Practice Committee meets three times a year to review all American Gastroenterological Association Institute (AGAI) guidelines. This review includes new literature searches of electronic databases followed by expert committee review of new evidence that has emerged since the original publication date.

Recommendations

Major Recommendations

Definitions for the quality of evidence (high, moderate, low, very low) and strength of recommendation (strong, weak) are provided at the end of the "Major Recommendations" field.

Note: Although the overall classification of chronic constipation into 3 categories (i.e., normal transit, isolated slow transit, and defecatory disorders) and several recommendations in this version are similar to the prior version, there are 3 substantive changes. First, these guidelines recommend assessment of colonic transit at a later stage, that is, only for patients who do not have a defecatory disorder or patients with a defecatory disorder that has not responded to pelvic floor retraining. Second, the evidence supporting these recommendations has been evaluated using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) system, in which the strength of recommendation is rated as strong or weak and the quality of evidence is rated as high, moderate, low, or very low. Third, therapeutic recommendations have been updated to include newer agents and delete certain older agents.

Clinical Evaluation

Clinical Assessment of Constipation

If feasible, discontinue medications that can cause constipation before further testing (Strong Recommendation, Low-Quality Evidence). A careful
digital rectal examination that includes assessment of pelvic floor motion during simulated evacuation is preferable to a cursory examination without these maneuvers and should be performed before referral for anorectal manometry. However, a normal digital rectal examination does not exclude defecatory disorders (Strong Recommendation, Moderate-Quality Evidence).

**Diagnostic Tests**

What Tests Should Be Performed to Assess for Medical Causes of Constipation?

In the absence of other symptoms and signs, only a complete blood cell count is necessary (Strong Recommendation, Low-Quality Evidence).

Unless other clinical features warrant otherwise, metabolic tests (glucose, calcium, sensitive thyroid-stimulating hormone) are not recommended for chronic constipation (Strong Recommendation, Moderate-Quality Evidence).

A colonoscopy should not be performed in patients without alarm features (e.g., blood in stools, anemia, weight loss) unless age-appropriate colon cancer screening has not been performed (Strong Recommendation, Moderate-Quality Evidence).

Anorectal manometry and a rectal balloon expulsion should be performed in patients who fail to respond to laxatives (Strong Recommendation, Moderate-Quality Evidence).

Defecography should not be performed before anorectal manometry and a rectal balloon expulsion test (Strong Recommendation, Low-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).

**Medical Management**

What is the Initial Treatment Approach for Constipation?

After discontinuing medications that can cause constipation and performing blood and other tests as guided by clinical features, a therapeutic trial (i.e., fiber supplementation and/or 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).

Anorectal tests should be performed in patients who do not respond to these measures (Strong Recommendation, High-Quality Evidence).

Pelvic floor retraining by biofeedback therapy rather than laxatives is recommended for defecatory disorders (Strong Recommendation, High-Quality Evidence).

**Surgical Treatment of Constipation**

What Approaches Should Be Considered for Constipation Unresponsive to Initial Approaches?

When bowel symptoms are refractory to simple laxatives, newer agents should be considered in patients with NTC or STC (Weak Recommendation, Moderate Quality Evidence).

Anorectal tests and colonic transit should be reevaluated when symptoms persist despite an adequate trial of biofeedback therapy (Strong Recommendation, Low Quality Evidence).

A subtotal colectomy rather than continuing therapy with chronic laxatives should be considered for patients with symptomatic STC without a defecatory disorder (Weak Recommendation, Moderate-Quality Evidence).

Colonic intraluminal testing (manometry, barostat) should be considered to document colonic motor dysfunction before colectomy (Weak Recommendation, Moderate-Quality Evidence).

Suppositories or enemas rather than oral laxatives alone should be considered in patients with refractory pelvic floor dysfunction (Weak Recommendation, Low Quality Evidence).
Definitions:

Quality of Evidence

<table>
<thead>
<tr>
<th>Quality of Evidence</th>
<th>Estimate of Certainty of Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Further research is very unlikely to change the estimate of effect</td>
</tr>
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Note: The quality of evidence was ranked in accordance with the Grading of Recommendations Assessment, Development and Evaluation (GRADE) criteria.

Strength of Recommendation

<table>
<thead>
<tr>
<th>Strong</th>
<th>Based on the available evidence, the benefits outweigh risks and there is less variability in patient's values and preferences.</th>
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<tbody>
<tr>
<td>Weak</td>
<td>Based on the available evidence, the benefits, risks, and the burden of intervention are more closely balanced, or appreciable uncertainty exists in regards to patient's values and preferences.</td>
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Clinical Algorithm(s)

The following algorithms are provided in the original guideline document:

- Treatment algorithm for chronic constipation
- Treatment algorithm for normal transit constipation (NTC) and slow transit constipation (STC)
- Treatment algorithm for defecating disorders

Scope

Disease/Condition(s)

Constipation

Guideline Category

Diagnosis
Evaluation
Management
Treatment

Clinical Specialty

Family Practice
Gastroenterology
Internal Medicine
Intended Users

Physicians

Guideline Objective(s)

- To review rational and, where possible, more judicious diagnostic approaches to constipation
- To review rational and efficacious therapies that will improve constipation symptoms

Target Population

Adults

Interventions and Practices Considered

Diagnosis/Clinical Evaluation

1. Patient History (including a full record of prescription and over-the-counter medications)
2. Physical examination
3. Complete blood cell count
4. Metabolic tests (thyroid-stimulating hormone, serum glucose, creatinine, and calcium)
5. Colonoscopy or flexible sigmoidoscopy
6. Computer tomographic colonography
7. Barium enema
8. Colonic transit test (CTT)
9. Anorectal manometry (ARM)
10. Balloon expulsion test (BET)
11. Barium defecography
12. Colonic intraluminal testing (manometry, barostat)

Treatment/Management

1. Discontinuation of medications that cause constipation
2. Biofeedback
3. Increased fiber intake (foods in diet or supplements)
4. Stimulant laxatives (bisacodyl, glycerol suppositories)
5. Osmotic agents (milk of magnesia, polyethylene glycol)
6. Lubiprostone, linaclotide
7. Suppositories or enemas
8. Surgical treatment of slow-transit constipation
9. Pelvic floor retraining

Major Outcomes Considered

- Prevalence of constipation
- Sensitivity and specificity of diagnostic approaches
- Effectiveness of treatment options

Methodology

Methods Used to Collect/Select the Evidence
Hand-searches of Published Literature (Secondary Sources)

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

Separate searches were performed for epidemiology of constipation, diagnostic testing for constipation, and management of constipation. All searches used the Ovid Medline® in-process, other non-indexed citations, and Ovid Medline® 1946 to present. Articles were limited to "English language" and "humans". Where a prior systematic review was available, the search was limited to a start date preceding the year in which the article was published.

Number of Source Documents

Not stated

Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

Quality of Evidence

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Note: The quality of evidence was ranked in accordance with the Grading of Recommendations Assessment, Development and Evaluation (GRADE) criteria.

Methods Used to Analyze the Evidence

Review

Description of the Methods Used to Analyze the Evidence

This medical position statement is published in conjunction with a Technical Review on the same subject (see the "Availability of Companion Documents" field), and interested readers are encouraged to refer to this publication for in-depth considerations of topics covered by these questions. The technical review was begun before the American Gastroenterological Association's (AGA) decision to adopt the Grading of Recommendations Assessment, Development and Evaluation (GRADE) system. However, a GRADE methodologist worked with the authors and panel to rank the quality of the evidence and strength of recommendations. The medical position statement presents information by addressing clinically related questions and summarizing key points from the technical review.

Methods Used to Formulate the Recommendations

Expert Consensus
Description of Methods Used to Formulate the Recommendations

When specific recommendations about medical interventions or management strategies for patients with constipation are stated, the "strength of recommendation" and the "quality of evidence" are provided. The strength of recommendation is either judged as "weak" or "strong" and quality of evidence is ranked as high, moderate, low, or very low in accordance with Grading of Recommendations Assessment, Development and Evaluation (GRADE) criteria. Recommendations are highlighted by appearing within a text box. A strong recommendation implies that, based on available evidence, the benefits outweigh risks and there is less variability in patient's values and preferences. A weak recommendation implies that benefits, risks, and the burden of intervention are more closely balanced, or appreciable uncertainty exists in regards to patient’s values and preferences.

Rating Scheme for the Strength of the Recommendations

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Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

Method of Guideline Validation

Internal Peer Review

Description of Method of Guideline Validation

This document presents the official recommendations of the American Gastroenterological Association (AGA) on constipation. It was drafted by the AGA Institute Medical Position Panel, reviewed by the Clinical Practice and Quality Management Committee, and approved by the AGA Institute Governing Board.

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The type of supporting evidence is provided for each recommendation (see the "Major Recommendations" field).

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

- More judicious diagnostic approaches
- More efficacious therapies that will improve symptoms
- Beneficial fiscal and logistic impacts on the health care system

Potential Harms
Although newer agents may also be considered without assessing colonic transit, the long-term side effects, if any, of these agents are unknown and exposure to such potential risks might be more appropriate in patients with more severe forms of constipation associated with slow transit.

Qualifying Statements

Qualifying Statements

- Medical Position Statements are derived from the data available at the time of their creation and may need to be modified as new information is generated. Unless otherwise stated, these statements are intended for adult patients.
- These documents are not to be construed as standards of care. All decisions regarding the care of a patient should be made by the physician in consideration of all aspects of the patient's specific medical circumstances. A comprehensive background paper, the Technical Review, provides the user of the Medical Position Statement with the evidence used to formulate a particular recommendation and the strength and character of that evidence.

Implementation of the Guideline

Description of Implementation Strategy

An implementation strategy was not provided.

Implementation Tools

Clinical Algorithm

For information about availability, see the Availability of Companion Documents and Patient Resources fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

- Getting Better
- Living with Illness

IOM Domain

- Effectiveness
- Patient-centeredness

Identifying Information and Availability

Bibliographic Source(s)
Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2000 May 21 (revised 2013 Jan)

Guideline Developer(s)

American Gastroenterological Association Institute - Medical Specialty Society

Source(s) of Funding

American Gastroenterological Association Institute

Guideline Committee

American Gastroenterological Association Institute Medical Position Panel

Composition of Group That Authored the Guideline

The American Gastroenterological Association (AGA) Institute Medical Position Panel consisted of the lead technical review author (Adil E. Bharucha, MBBS, MD, AGAF), a Clinical Practice and Quality Management Committee representative and content expert (Spencer D. Dorn, MD, MPH), and two gastroenterologists and content experts (Anthony Lembo, MD, and Amanda Pressman, MD)

Financial Disclosures/Conflicts of Interest

The authors disclose the following: Anthony Lembo is a consultant to and an advisory board member for Ironwood Pharmaceuticals and Forest Laboratories. Spencer D. Dorn is a consultant to Ironwood Pharmaceuticals and Forest Laboratories and has received research support from Forest Laboratories, Ironwood Pharmaceuticals, Synergy Pharmaceuticals, and Takeda Pharmaceuticals. Adil E. Bharucha is an employee of the Mayo Clinic, has a financial interest in a new technology related to anal manometry, and has been a consultant for Helsin Therapeutics and Asubio Pharmaceuticals. Amanda Pressman discloses no conflicts.

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Guideline Availability
Electronic copies: Available from the Gastroenterology Journal Web site.

Print copies: Available from American Gastroenterological Association Institute, 4930 Del Ray Avenue, Bethesda, MD 20814.

Availability of Companion Documents

The following is available:


Patient Resources

None available

NGC Status

This summary was completed by ECRI on June 5, 2002. The information was verified by the guideline developer on July 12, 2002. This NGC summary was updated by ECRI Institute on March 25, 2013. The updated information was verified by the guideline developer on May 7, 2013.

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