

## DEFINE THE PROBLEM (cont'd)

- Onset associated with a change in form (appearance) of stool

*\*An uncomfortable sensation not described as pain.*

### Constipation Subtypes

- Normal transit (functional constipation, 59%)
- Slow transit (13%)
  - Primary dysfunction of the colonic smooth muscle (myopathy) or its nerve innervation (neuropathy)
- Defecatory disorders
  - Dyssynergic defecation (25%)
    - Anismus
    - Pelvic-floor dyssynergia
    - Paradoxical pelvic-floor contraction
    - Outlet obstruction constipation
    - Functional rectosigmoid obstruction

- Spastic pelvic-floor syndrome
- Functional fecal retention in children

- IBS-C

### Dyssynergic Defecation Subtypes

- Subtype 1: The patient can generate an adequate pushing force (rise in intra-abdominal pressure) along with a paradoxical increase in anal sphincter pressure
- Subtype 2: The patient is unable to generate an adequate pushing force (no increase in intrarectal pressure) but can exhibit a paradoxical anal sphincter contraction
- Subtype 3: The patient can generate an adequate pushing force (increase in intrarectal pressure) but has absent or incomplete (<20%) sphincter relaxation (ie, no decrease in anal sphincter pressure)

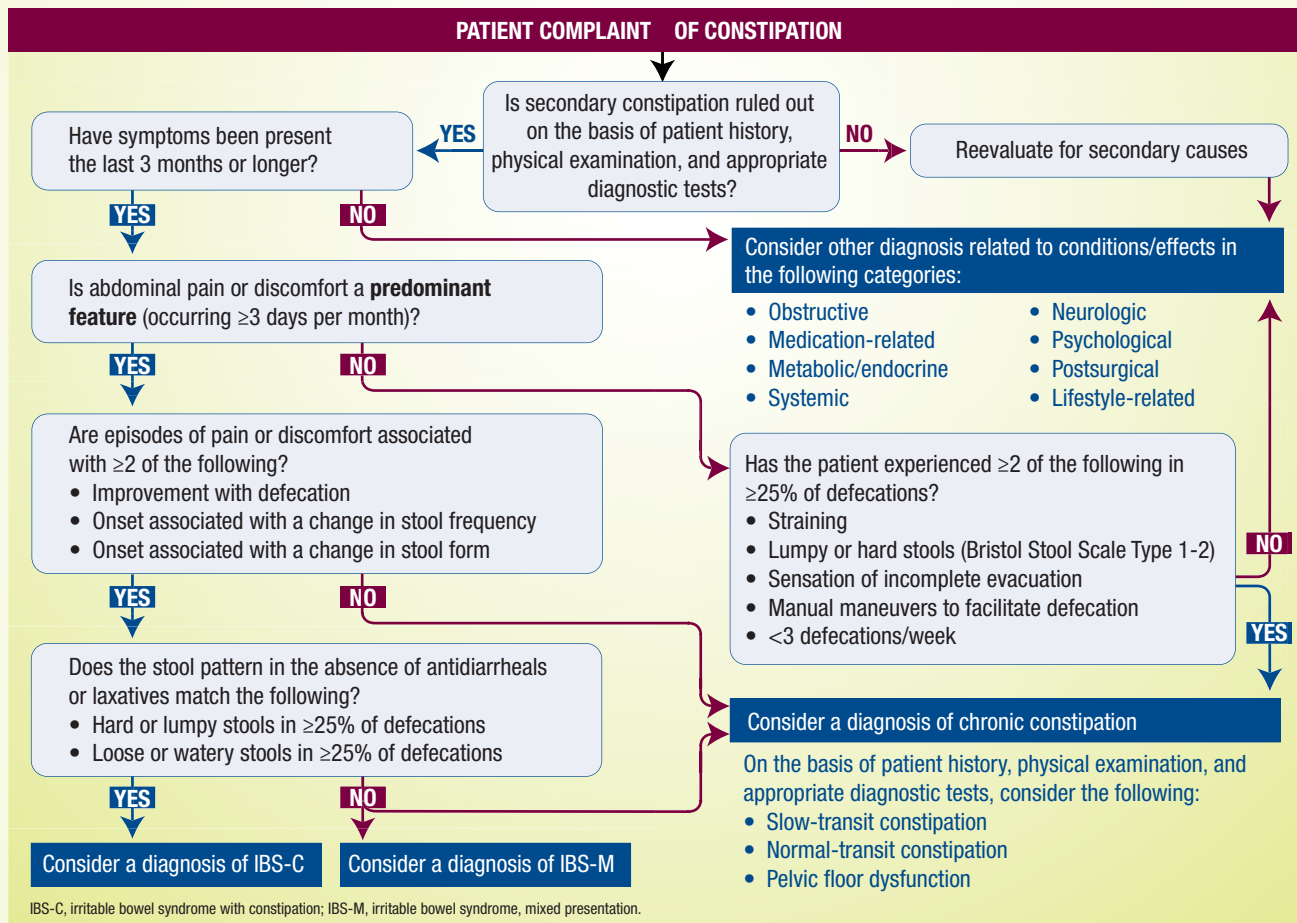


JOHNS HOPKINS  
MEDICINE

CONTINUING MEDICAL EDUCATION

Presented by the Johns Hopkins University School of Medicine

## ROME III DIAGNOSTIC ALGORITHM FOR PATIENTS WITH A COMPLAINT OF CONSTIPATION



Drossman DA. *Gastroenterology*. 2006;130:1377-1390. Updated by PeerPoint Medical Education Institute, LLC. All users should verify all information and data before using any therapies or procedures.

EDUCATIONAL INITIATIVE ON  
**CONSTIPATION**

Focusing on IBS-C and Chronic Constipation

**TOOLKIT**



In collaboration with the American Academy of Nurse Practitioners

This educational program has been facilitated by Gullapalli and Associates, LLC.








## STEP 1:

### PHYSICIAN-PATIENT COMMUNICATION: MAKE SURE YOU UNDERSTAND THE PATIENT'S COMPLAINT

- What are your concerns?
- What do you mean by constipation?
- What do you mean by infrequent bowel movements?
- What bothers you the most about your constipation?
  - Straining
  - Hard stool
  - Unsatisfactory defecation
  - Symptoms between bowel movements (eg, bloating, pain, malaise)
- Do you have abdominal pain?
- How long have you experienced these symptoms?
- Do you need to use manual maneuvers to assist with defecation?
- Does constipation limit or affect your daily activities?
- What laxatives have you tried?
  - Were they effective?
  - Did you experience any adverse effects after their use?
  - How often do you use them?
  - What dosage(s) of each medication have you used?
- Are you taking any herbal medications, teas, or prune juice?
- What (gastrointestinal-related) diagnostic tests or studies have been performed for this problem?
- Have you been anxious or depressed lately?
- What are your strategies for dealing with stress?
- What are your goals?

## STEP 2:

### BRISTOL STOOL FORM SCALE

Slow Transit	Type 1		Separate hard lumps, like nuts
	Type 2		Sausage-like but lumpy
	Type 3		Like a sausage but with cracks in the surface
	Type 4		Like a sausage or snake, smooth and soft
	Type 5		Soft blobs with clear-cut edges
	Type 6		Fluffy pieces with ragged edges, a mushy stool
Fast Transit	Type 7		Watery, no solid pieces

## STEP 4:

### EVALUATE THE PATIENT'S DEFECATORY FUNCTION

- Physical examination including comprehensive digital rectal examination

## STEP 3:

### RULE OUT SECONDARY CAUSES

#### Red Flags

- Hematochezia
- Family history of colon cancer
- Family history of inflammatory bowel disease
- Anemia
- Severe, persistent constipation that is unresponsive to treatment
- New-onset constipation in an elderly patient
- Positive fecal occult blood test
- "Unexplained" weight loss of  $\geq 10$  pounds

### MEDICATIONS ASSOCIATED WITH CONSTIPATION

Prescriptions	Over-the-Counter
<ul style="list-style-type: none"> <li>■ Opiates</li> <li>■ Anticholinergic agents</li> <li>■ Tricyclic antidepressants</li> <li>■ Calcium channel blockers</li> <li>■ Sympathomimetic agents</li> <li>■ Antiparkinsonian agents</li> <li>■ Antipsychotic drugs</li> <li>■ Diuretics</li> <li>■ Antihistamines</li> </ul>	<ul style="list-style-type: none"> <li>■ Antacids, especially Ca+</li> <li>■ Calcium supplements</li> <li>■ Iron supplements</li> <li>■ Antidiarrheal agents</li> <li>■ NSAIDs</li> </ul>

## STEP 5:

### ORDER DIAGNOSTIC TESTS

Test	Advantages	Disadvantages*
Colon Transit (radio-opaque) Grade: B2/Good	Evaluates slow, normal, or rapid colonic transit; inexpensive; widely available	Widely available Inconsistent methods Inexpensive
Colon Transit (scintigraphy) Grade: B2/Good	Evaluates slow, normal, or rapid colonic transit; whole gut transit	Expensive Time-consuming Limited availability
Anorectal Manometry Grade: B2/Good	Identifies dyssynergic defecation, rectal hypersensitivity, Hirschsprung's disease	Widely available Multiple methods
Balloon Expulsion Grade: B2/Good	Simple, inexpensive, bedside assessment	Lacks standardization
Colonic Manometry Grade: B3/Good	Identifies colonic myopathy, neuropathy, or normal function (pre-op)	Invasive Not widely available

\*Several investigators have reported different test methodology that may lead to variable diagnostic clinical conclusions. Depending on methods utilized, findings may not be applicable universally and caution is advised when reading and interpreting the literature.

Rao. *Gastroenterol Clin North Am.* 2007;36:687-711.

## STEP 6:

### DEFINE THE PROBLEM

#### Rome III Definition: Chronic Constipation

- Symptom onset: 6 months
- Symptom duration: 3 months
- Must include  $\geq 2$  or more in at least  $\geq 25\%$  of defecations:
  - Straining
  - Lumpy or hard stools
  - Sensation of incomplete evacuation
  - Sensation of anorectal obstruction or blockage
  - Manual maneuvers to facilitate defecation (eg, digital evacuation, support of the pelvic floor)
  - $< 3$  defecations per week
- Loose stools rarely present without the use of laxatives
- Insufficient criteria for IBS

#### Rome III Definition: Irritable Bowel Syndrome

- Symptom onset: 6 months prior to diagnosis
- Duration:  $> 3$  days/month for last 3 months
- Recurrent abdominal pain or discomfort\* associated with  $> 2$  of the following:
  - Improvement with defecation
  - Onset associated with a change in frequency of stool and/or change in stool consistency