

CHRONIC CONSTIPATION: SUMMARY OF A MULTIDISCIPLINARY ROUNDTABLE

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INTRODUCTION

A multidisciplinary panel, including specialists in obstetrics and gynecology (Ob/Gyn), family medicine, and gastroenterology, participated in a roundtable to discuss challenges in raising awareness of chronic constipation in women and overcoming barriers to diagnosing and managing the condition. The goals of the discussion focused on helping Ob/Gyn specialists and other primary healthcare professionals better understand the prevalence and etiology of chronic constipation, more easily recognize the types of chronic constipation, and improve their ability to diagnose the condition. The roundtable also served as a forum where gastroenterologists might educate Ob/Gyn specialists and other primary care providers. The following is a summary of the key discussion points from the roundtable.

THE EPIDEMIOLOGY OF CHRONIC CONSTIPATION

The estimated prevalence of the disorder ranges from 2% to 19% and as high as 27%.¹ Similar to other chronic conditions, there is a trend toward increased prevalence with aging.¹ Additionally, women appear to be affected more often than men, as reflected by a median female-male ratio of 2.20 found across several studies (Table 1).¹

Morbidity associated with chronic constipation is minimal; however, its symptoms can be bothersome, and the condition can negatively impact quality of life.² Based on a 2007 study, 12% of respondents who worked or went to school reported missing an average of 2.4 days per month from work or class because of chronic constipation symptoms. Individuals may not cite chronic constipation as a reason for missing work or school, which may contribute to failure of clinicians to recognize the condition as a health issue.

Table 1. Prevalence of Chronic Constipation According to Gender¹

Study	Population	Criteria	Males	Females	Ratio F/M
Hammond	ACS	Self-report	18.5	33.7	1.82
Sandler	NHANES I	Self-report	7.0	18.2	2.60
Everhart	NHANES I	Self-report	8.0	20.8	2.60
Johanson	NHIS 1983-1987	Self-report	0.9	2.8	3.11
Harari	NHIS 1989	Self-report	1.3	4.9	3.77
Talley	Olmsted Whites 1991	Strain and hard or <3/wk	13.9	20.8	1.50
Talley	Olmsted Whites 1993	Self-report	2.7	7.3	2.70
		Rome I FC	18.3	20.1	1.01
		Rome I OD	5.2	16.5	3.17
Drossman	Householder	Rome I FC	2.4	4.8	2.00
		Rome I dyschezia	11.5	16.0	1.39
Stewart	US EPOC	Rome II, FC or OD or IBS-C	12.0	16.0	1.33
Pare	Canada	Self-report	18.4	35.4	1.92
		Rome I	12.0	21.0	1.75
		Rome II	8.3	21.1	2.54

ACS=American Cancer Society; FC=functional constipation; IBS-C=constipation-dominant irritable bowel syndrome; NHANES=National Health and Nutrition Examination Survey; NHIS=National Health Interview Survey; OD=outlet delay; US EPOC=United States Epidemiology of Constipation.

Adapted from Higgins PDR, Johanson JF. *Am J Gastroenterol.* 2004;99:750-759.

“It is much easier to deal with a concrete, structural problem [than one such as chronic constipation]. You have a condition where the gastrointestinal tract appears normal but is not functioning normally.”

Susan Lucak, MD

Key Concepts from the Roundtable Regarding Epidemiology

- Chronic constipation is a common condition and affects more women than men, at an approximate 2:1 ratio.¹
- While morbidity associated with chronic constipation is relatively low, patients report that its symptoms can be bothersome, and the condition can negatively affect their quality of life.²
- Chronic constipation accounts for substantial absenteeism from work or school.²

DIAGNOSING CHRONIC CONSTIPATION

The core discussion of the roundtable centered on increasing awareness of chronic constipation in women and improving its diagnosis in primary care medicine. Foremost in this discussion was defining chronic constipation. Inherent in assuring provider and patient concordance is the assessment of what constitutes chronic constipation from each perspective. As the participants pointed out, the definition may differ from patient to patient and between providers and patients.

What Is Chronic Constipation?

The American College of Gastroenterology (ACG), the American Gastroenterological Association (AGA), and Rome III provide definitions of chronic constipation or insights into factors involved in defining the condition.³⁻⁶ According to the ACG

Chronic Constipation Task Force, chronic constipation “is a symptom-based disorder, defined as unsatisfactory defecation and is characterized by infrequent stools, difficult stool passage, or both.”³ Symptoms include straining, a sense of difficulty passing stool, incomplete evacuation, hard or lumpy stools, prolonged time to stool, or need for manual maneuvers to pass stool.³ The AGA points out that the condition is not consistently defined and emphasizes the importance of listening to patients’ complaints when making a diagnosis of chronic constipation.^{4,5} Patients’ definition of chronic constipation may include straining, stools that are excessively hard, unproductive urges, infrequency, and a feeling of incomplete evacuation. The AGA also indicates that patients may describe chronic constipation despite having daily, and even more frequent, bowel movements.⁵

The Rome III classification offers diagnostic criteria, and patients must experience the symptoms for the last 3 months with symptom onset at least 6 months prior to diagnosis. Refer to Table 2 for the complete Rome III criteria.⁶

The panel concurred that despite published definitions for chronic constipation, substantial differences can exist between how physicians and patients define the condition. In addition to frequency, patients may also consider difficulty in defecating a component of chronic constipation, while physicians may focus primarily on frequency. Physicians should appreciate all symptoms of chronic constipation and ask about each one during patient assessment.

“Patients may have a lot of straining and difficulty passing stool. They may have a sense of incomplete evacuations and may have hard stools, all of which are symptoms of chronic constipation. But [this information] doesn’t get captured in the patient history.”

Susan Lucak, MD

The patient history is critical for diagnosing chronic constipation. Women with chronic constipation may experience different symptoms; yet, all of them may have the condition. Thus, it is important to define what normal bowel movement is for each patient. The patient’s perception—what is normal for her—should guide the assessment. Patients may have misconceptions about what a bowel movement is and may lack knowledge and understanding on issues relevant to chronic constipation. Such issues should be identified when taking the patient history to ensure the description of bowel movements is as accurate as possible. The chronicity of symptoms should also be obtained.

Exploring a patient’s lifestyle, such as diet and level of physical activity, as well as medical and medication histories, may provide information suggestive of risk for chronic constipation. Identifying secondary causes of chronic constipation, such as a medication (Table 3)⁴ or medical condition (Table 4)⁴ may be important for patient management.

At all visits, overall health should be evaluated in every patient. The gastrointestinal health of patients should be included in the evaluation.

“What is really important is that physicians understand that patients may have all of these symptoms and to ask specifically [about these symptoms], not just ask whether or not the patient is constipated.”

Susan Lucak, MD

*Tables 2-4 appear on page 4;
text continues on page 5.*

Table 2. Rome III Diagnostic Criteria for Functional Chronic Constipation⁶

Complaint/Symptom	
<p>Fulfilled for the last 3 months Onset of symptoms at least 6 months prior to diagnosis Include 2 or more of the following:</p> <ul style="list-style-type: none"> • Infrequent defecation (<3/wk) • Straining • Lumpy or hard stools • Sensation of incomplete evacuation • Sensation of anorectal obstruction/blockage • Manual maneuvers to facilitate defecation <p>Loose stools rarely present without the use of laxatives Insufficient criteria for irritable bowel syndrome</p>	
	<p>For at least 25% of defecations</p>

Adapted from Longstreth GF, Thompson WG, Chey WD, Houghton LA, Mearin F, Spiller RC. *Gastroenterology*. 2006;13:1480-1491.

Table 3. Medications That Might Cause Chronic Constipation⁴

Prescription Medications (Example)	Non-prescription Medications (Example)
Opiates (morphine)	Antacids, especially calcium-containing (Tums)
Anticholinergic agents (Librax, belladonna)	Calcium supplements
Tricyclic antidepressants (amitriptyline > nortriptyline)	Iron supplements
Calcium channel blockers (verapamil HCl)	Antidiarrheal agents (loperamide, attapulgite)
Antiparkinsonian drugs (amantadine HCl)	Non-steroidal anti-inflammatory drugs (ibuprofen)
Sympathomimetics (ephedrine, terbutaline)	
Antipsychotics (chlorpromazine)	
Diuretics (furosemide)	
Antihistamines (diphenhydramine)	

Adapted from Lock GR III, Pemberton JH, Phillips SF. *Gastroenterology*. 2000;119:1766-1778.

Table 4. Possible Medical Causes of Chronic Constipation⁴

Mechanical Obstruction	Metabolic Conditions	Myopathies	Neuropathies	Other Conditions
Colon cancer	Diabetes mellitus	Amyloidosis	Parkinson's disease	Depression
External compression from malignant lesion	Hypothyroidism	Scleroderma	Spinal cord injury or tumor	Degenerative joint disease
Strictures (diverticular or posts ischemic)	Hypercalcemia		Cerebrovascular disease	Autonomic neuropathy
Rectocele (if large)	Hypokalemia		Multiple sclerosis	Cognitive impairment
Megacolon	Hypomagnesemia			Immobility
Anal fissure	Uremia			Cardiac disease
	Heavy metal poisoning			

Adapted from Lock GR III, Pemberton JH, Phillips SF. *Gastroenterology*. 2000;119:1766-1778.

Just as the patient history serves as a foundation for assessment of chronic constipation, the physical examination may provide clues to the diagnosis and a possible cause. In addition to a thorough physical exam, a comprehensive rectal examination should be conducted to rule out an obstruction. The anal reflex, anal sphincter tone, and anal sphincter contraction during straining should also be assessed. The presence of blood on examination or in stools should be evaluated further. Also, certain tests may suggest a diagnosis other than chronic constipation and serve as a screening. These tests may be included in the diagnostic workup of a patient with symptoms of the condition⁵:

- Complete blood cell count
- Measurement of thyroid-stimulating hormone, serum glucose, and creatinine
- Assessment of calcium levels

Referral for colonoscopy is appropriate for an older woman (eg, ≥ 50) and at a younger age for at-risk women.⁷

Key Concepts from the Roundtable Regarding Diagnosing Chronic Constipation

- Primary healthcare providers must be cognizant of an appropriate definition of chronic constipation and effectively communicate this information to patients.
- Underlying medical conditions and/or medications should be ruled out as causes of chronic constipation.⁴
- Using diagnostic criteria for chronic constipation may assist in ruling out other conditions and confirming the diagnosis.
- Including a section on the patient questionnaire that asks specific questions regarding symptoms of chronic constipation might ensure early and effective recognition of the condition.
- In addition to the patient's history, physical examination and certain laboratory tests should be included in the diagnostic workup.⁵

BARRIERS TO DIAGNOSING CHRONIC CONSTIPATION

Several factors might impede making a diagnosis of chronic constipation, such as the presence of confounding conditions, patient misconception of what constitutes a bowel movement, and others. However, the obstacle that might hinder diagnosing chronic constipation the most may be patients' reluctance to report symptoms and healthcare providers' failure to ask questions about symptoms suggestive of the condition.

"I have not had a single woman, or maybe only one or two, who will volunteer that kind of information."

Albena Halpert, MD

Education—of both patients and providers—is the key to improved recognition and diagnosis of chronic constipation. When the diagnosis is in doubt, the physician should defer to the patient's perception.

The use of existing tools and development of new ones might help overcome the barrier of patient and provider failure to recognize the importance of diagnosing chronic constipation. As an example, a questionnaire employing Rome III criteria is available for patient assessment.⁸ To address the possible dichotomy between diagnostic criteria and patient perception, development of patient education handouts might also be one measure to improve the diagnosis of chronic constipation. The panel agreed that one of the most effective means of communicating the patient experience to clinicians is through a vignette or case study. A case study may effectively illustrate patient presentation, potential barriers to diagnosing chronic constipation, and means to differentiate primary from secondary chronic constipation. The development of additional vignettes could be used to highlight a specific diagnostic challenge. Making tools such as patient questionnaires and

vignettes available online at the Ob/Gyn Alliance website (<http://obgynalliance.com>) would be useful for increasing awareness of the prevalence of chronic constipation in women.

Key Concepts from the Roundtable Regarding Barriers to Diagnosing Chronic Constipation

- The No. 1 barrier to timely and accurate differential diagnosis of chronic constipation may be that patients are reluctant to report symptoms to their healthcare providers and the providers do not ask their patients about symptoms of chronic constipation.
- Education—of patients and providers alike—is needed to overcome this barrier.
- Several pathways to improved recognition of the need to screen for and diagnose chronic constipation exist or may be developed, such as patient questionnaires regarding the symptoms and diagnostic criteria, patient education materials, and for clinicians, vignettes that simulate clinical practice and illustrate challenges and ways to meet such challenges in diagnosing chronic constipation.

For more information on chronic constipation, including treatment options, the reader is referred to the ACG and AGA guidelines,³⁻⁵ as well as the International Foundation for Functional Gastrointestinal Disorders (IFFGD) website (www.aboutconstipation.org).

SUMMARY

Chronic constipation is a common condition that appears to affect substantially more women than men. Though associated with low morbidity, chronic constipation negatively affects a person's ability to function and perform activities of daily living and quality of life. Increased awareness of the symptoms of chronic constipation and the possibility that patients' perceptions may vary from clinicians' perceptions and diagnostic criteria may improve timely diagnosis of the condition. Primary healthcare providers, including Ob/Gyn specialists who are often called

upon to deliver primary healthcare, are in a pivotal position to improve their ability to diagnose chronic constipation. Education with the use of a variety of tools for both patients and primary healthcare providers can be the key to improved recognition and diagnosis of the condition in women.

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