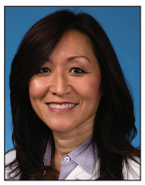
ADVANCES IN IBS

Current Developments in the Treatment of Irritable Bowel Syndrome

Section Editor: William D. Chey, MD

Updates to the Rome Criteria for Irritable Bowel Syndrome



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G&H What are the Rome IV criteria, and how were they developed?

LC The Rome criteria were originally developed to understand functional gastrointestinal disorders (FGIDs), which are conditions that are based on symptoms that cluster as opposed to conditions that are defined by organ pathology (microscopic or macroscopic), such as inflammatory bowel disease and celiac disease, or by altered motility, such as gastroparesis or achalasia. The Rome IV diagnostic criteria are the most recent iteration of symptom-based criteria for FGIDs and were developed in a collaborative effort between 126 experts representing 26 countries. The process to update Rome III criteria, which were published in 2006, began in 2008 with the creation of working teams to acquire knowledge in key areas in preparation for Rome IV. Between 2010 and 2015, committee members collected, evaluated, presented, and modified clinical trial data in various areas of interest, including the adult, adolescent, and neonate/toddler patient populations with irritable bowel syndrome (IBS) and FGIDs. Following peer review in 2015, the Rome IV criteria underwent a final round of editing and were released in June 2016.

G&H What are the main updates included in Rome IV, and why were these changes made?

LC Ten major updates were made to the Rome IV criteria. First, the term discomfort was removed from IBS criteria, as studies found that it was defined differently across care settings, ranging from a mild form of bloating or collection of symptoms to urgency. Now, the term pain is used to establish a diagnosis of IBS. Additionally, the threshold for pain increased from 3 days per month to 1 day per week based on normative bowel symptom data in the US population.

Second, the identification of IBS subtypes now relates to the proportion of symptomatic stools (loose/watery vs hard/lumpy) rather than all stools (including normal) in order to reduce the number of patients with unclassified IBS.

Third, bowel disorder subtypes (ie, constipation, diarrhea, mixed, unclassified) are viewed on a spectrum rather than as separate disorders so as to account for the differences in symptom intensity, quantity, and severity described by patients. For example, the symptoms of IBS with constipation overlap with chronic constipation and, therefore, the category may switch depending on the degree of pain.

Fourth, the diagnosis of reflux hypersensitivity (ie, the association of heartburn with reflux) was added to identify patients who have heartburn but normal acid reflux levels, and to differentiate them from patients with functional heartburn (ie, gastroesophageal reflux that does not correlate with symptoms of heartburn).

Fifth, conditions that were suspected of being FGIDs but now have known etiologies were added because they present similarly to FGIDs and should be distinguished from them. Particularly, cyclic vomiting syndrome linked to cannabis use is classified as cannabinoid hyperemesis syndrome, and diagnoses of

opioid-induced constipation and narcotic bowel syndrome have been added.

Sixth, the term functional has been removed from certain diagnoses (eg, fecal incontinence, centrally mediated abdominal pain syndrome, esophageal disorders) due to its nonspecificity and potential for stigma. Furthermore, its use in FGIDs has been clarified, and it remains in certain clinical disorders (eg, functional diarrhea, functional heartburn) to distinguish them from similar disorders with different etiologies.

Seventh, frequency thresholds that differ from sample thresholds were established for diagnostic criteria to provide evidence-based thresholds for judging symptoms.

Eighth, functional vomiting and chronic idiopathic nausea have been combined into a new diagnosis known as chronic nausea vomiting syndrome because the management and diagnosis of both conditions lack clear separation.

Ninth, sphincter of Oddi dysfunction (SOD) types have been reclassified to remove Type III owing to a study by Dr Peter Cotton and colleagues in which SOD Type III was found not to be related to a spasm of the sphincter.

Finally, articles were added or modified to reflect the current knowledge and understanding of gastrointestinal function, the role of genetics in response to treatments, and biopsychosocial processes.

G&H Is any supplemental content included in this update?

LC The Rome IV criteria contain more than the standard chapters and symptom criteria. Educational materials are provided and include a multidimensional clinical profile (MDCP), which applies diagnostic criteria to clinical practice; updated diagnostic algorithms; and treatment algorithms, which will be available soon on a software platform as an interactive clinical decision toolkit. The toolkit captures the expert knowledge and decision-making from Rome IV and allows clinicians to interact directly with decision pathways and learn to manage FGIDs. New with this update are a pediatric book and a primary care book for pediatricians and primary care physicians, respectively, that are also capsulated in journal articles and available online. Essentially, there are 3 versions of every single chapter.

G&H How will the changes to the Rome criteria affect the prevalence of IBS?

LC Because the Rome IV diagnostic criteria removed abdominal discomfort and increased the pain threshold, the prevalence of IBS could decrease. This was seen in a study by Dr Olafur S. Palsson and colleagues, which compared the prevalence of IBS in community samples from the United States, United Kingdom, and Canada. The prevalence rates of IBS in the United States according to Rome III vs Rome IV criteria were 10.8% vs 6.1%, respectively. Additionally, the change in bowel habit subclassification based on stool form from daily to days with abnormal bowel habits has shown that the prevalence of mixed IBS declined and constipation-predominant IBS and diarrhea-predominant IBS (IBS-D) increased under Rome IV criteria.

G&H Are the Rome IV criteria intended for research, clinical practice, or both?

LC The criteria have been used predominantly in research studies but are gradually being incorporated into clinical practice. Rome IV criteria further developed the MDCP, which is a case-based method that integrates the diagnostic criteria with the psychosocial, physiologic, and severity components that contribute to the illness, in order to make this information applicable to clinical practice. Rome IV also created symptom-based algorithms that can be used to guide the diagnostic evaluation of these patients.

G&H What symptoms should clinicians be aware of when diagnosing patients with FGIDs?

LC Clinicians should pay attention to unintentional weight loss, bloody stools unrelated to hemorrhoidal bleeding, waking in the middle of the night with diarrhea (nocturnal diarrhea), and anemia. Additionally, a family history of colon cancer, inflammatory bowel disease, or celiac disease places the patient at higher risk for those conditions. In a patient with typical IBS symptoms and no other symptoms mentioned previously, limited diagnostic testing can be performed, and a positive diagnosis of IBS can be made.

G&H Which diagnostic tests can be ordered to supplement the symptom-based diagnostic criteria?

LC For IBS-D or mixed IBS, celiac serologies are recommended, as they have been shown to be cost-effective if the prevalence of celiac disease is at least 1%, which it is in the United States. A meta-analysis by Dr Stacy B. Menees and colleagues found that C-reactive protein and fecal calprotectin are helpful in excluding inflammatory bowel disease. A study on the use of IBS*chek* (Commonwealth Laboratories, LLC) showed that the device was able to differentiate between IBS-D and ulcerative colitis fairly well, but less so with IBS-D and Crohn's

disease or celiac disease. The study used the clinical trial population of IBS-D in a rifaximin (Xifaxan, Salix) retreatment study; thus, its applicability to other IBS-D patient populations needs to be studied. The specificity was high, but the sensitivity was low (approximately 50%). If a patient has a negative test, he or she could still have IBS. This test might be helpful in primary care populations to help determine if further testing should be performed to exclude inflammatory bowel disease.

G&H Are any other diagnostic tests available?

LC The Mayo Clinic has developed a fecal bile acid excretion test that requires a 48-hour stool sample to quantify individual and total bile acids to help diagnose bile acid diarrhea, which has clinical features that mimic IBS-D and functional diarrhea. The Mayo Clinic is also developing a blood test that could be indicative of bile acid diarrhea, but the test is not yet commercially available.

G&H Should the MDCP be considered as a way to describe patients with FGIDs in clinical practice?

LC The rationale for the MDCP is that the Rome criteria are a categorical classification system that does not include clinically meaningful subsets (eg, IBS-D, postinfectious IBS), dimensionality (eg, severity of symptoms or physiologic disturbances), psychosocial comorbidities that may affect treatment (eg, anxiety), or consideration for future diagnostic subcategories (eg, biomarkers). The MDCP augments the Rome criteria by providing patient-specific information to help guide and optimize treatment of FGIDs in clinical practice.

Dr Chang is a member of the Rome Foundation Board and Rome IV Editorial Board, and was a member of the Rome IV Functional Bowel Disorders Committee. Dr Chang has also served on advisory boards for Ironwood Pharmaceuticals, Synthetic Biologics Inc, IM HealthScience LLC, Synergy, and BioAmerica Inc, and was a speaker at a CME Takeda conference and an Allergan symposium.

Suggested Reading

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