

BOOK REVIEW

Rome III: The functional gastrointestinal disorders, third edition, 2006

Randa Mostafa

Randa Mostafa, Department of Basic Medical Sciences, College of Medicine, Sharjah University, Sharjah, United Arab Emirates

Author contributions: Randa Mostafa summarized the content of the 3rd edition of Rome III, assessed its quality and noted its contribution to the field; Randa Mostafa analyzed and compared Rome III with the previous edition of Rome II.

Correspondence to: Professor Randa Mostafa, Department of Basic Medical Sciences, College of Medicine, Sharjah University, PO Box: 27272, Sharjah,

United Arab Emirates. mostafaranda@sharjah.ac.ae

Telephone: +971-6-5057204 Fax: +971-6-5585879

Received: November 16, 2007 Revised: December 14, 2007

Abstract

Functional gastrointestinal disorders (FGIDs) represent a common and important class of disorders within gastroenterology. Rome I, the first edition was published in 1994, with symptom-based diagnostic criteria for FGIDs. These criteria began to change the diagnostic approach to FGIDs, and no longer considered "diagnoses of exclusion" but rather "diagnoses of inclusion". Rome II, the second edition published in 2000, resulted from the continual process of analyzing new scientific and clinical evidence in the study of FGIDs. Rome II, diagnostic criteria for irritable bowel syndrome (IBS), was extended with a focus on the frequency of symptoms occurring twelve weeks (not necessarily consecutive weeks) within twelve months. ROME III, the third edition, conservative one, was published in September 2006, with changes made only where there is good evidence to do so. Some of the differences between Rome II and Rome III criteria are highlighted in this issue.

© 2008 WJG. All rights reserved.

Key words: Rome III; Functional gastrointestinal disorders; Diagnosis; Classification

Peer reviewer: Olivier Barbier, CHUQ-CHUL Research Center, 2705 Laurier Boulevard, Québec G1V 4G2, Canada

Mostafa R. Rome III: The functional gastrointestinal disorders, third edition, 2006. *World J Gastroenterol* 2008; 14(13): 2124-2125 Available from: URL: <http://www.wjgnet.com/1007-9327/14/2124.asp> DOI: <http://dx.doi.org/10.3748/wjg.14.2124>

INTRODUCTION

Functional gastrointestinal disorders (FGIDs) represent

a common and important class of disorders within gastroenterology. They are a group of disorders in clinical medicine that have often posed immense problems for patients to experience, for clinicians to diagnose and treat, and for researchers to study.

The "road to Rome" began in Rome, Italy, in 1988 during the 12th International Congress of Gastroenterology, during which a working team was set up to create guidelines for the management and study of irritable bowel syndrome (IBS). After a publication outlining the classification system in 1990, several committees convened in Rome, Italy, throughout 1994 and began a process of review and analysis of the medical literature to improve the methodology for studying, diagnosing and treating 21 FGIDs. The ultimate goal was to improve the lives of patients and their families. The process has matured through three generations, producing a series of publications (Rome I, II and III), with an increased evidence-based approach to the recommendations.

ROME I AND ROME II

Rome I, the first edition published in 1994, is a compilation of documents previously published in *Gastroenterology International* over a period of 5 years by 30 international investigators who categorized the FGIDs from the esophagus to the anus. The most striking result of this process is the creation of the Rome I symptom-based diagnostic criteria for FGIDs. These criteria began to change the diagnostic approach to FGIDs, and no longer considered "diagnoses of exclusion" but rather "diagnoses of inclusion". The Rome criteria have enabled positive diagnoses without the need for extensive and unnecessary diagnostic studies to "rule out organic diseases".

Rome II, the second edition, published in 2000, resulted from the continual process of analyzing new scientific and clinical evidence in the study of FGIDs. Rome II, diagnostic criteria for irritable bowel syndrome (IBS), is extended with a focus on the frequency of symptoms occurring twelve weeks (not necessarily consecutive weeks) within twelve months.

For the first time, pediatric FGIDs were categorized, and chapters highlighting physiology of motility, sensation, brain-gut interactions, and psychosocial aspects were included.

ROME III

ROME III, the third edition, published in September

2006, is a 1048-page document written by a collaborative effort of 82 international experts. The book consists of seventeen chapters that contain the most recent information on the epidemiology, pathophysiology, diagnosis, and treatment of FGIDs. Diagnostic criteria for some of the FGIDs have been revised. "Red flag" symptoms and signs that warrant further diagnostic evaluation have been included. Suggestions for when to make a mental health referral have also been given with new chapters on pharmacology and pharmacokinetics, sociocultural perspectives related to gender, age, and cultural impact. One chapter is also devoted to the development and validation of the Rome III: Diagnostic Questionnaire. New appendices contain validated Rome III: adult and pediatric questionnaires and a table comparing Rome II and Rome III diagnostic criteria.

CHANGES IN ROME III

The Rome III process is a conservative one, with changes made only where there is good evidence to do so. The following is a summary of the changes in criteria and other recommendations along with their justification.

Time frame change for FGIDs

The time frame for a diagnosis now originates at 6 mo prior to clinical presentation and diagnosis and must be currently active (i.e., meet criteria) for 3 mo. This time frame is less restrictive than that in Rome II (12 wk of symptoms over 12 mo) and is easier to understand in a questionnaire or for research and clinical practice.

Changes in classification categories

The Rome II: category of Childhood Functional GI Disorders, is now classified as Childhood Functional GI Disorders: Neonate/Toddler (Category G) and Childhood Functional GI Disorders: Child/Adolescent (Category H). This reflects the different clinical conditions existing between the two categories relating to the growth and development of the child, thus removing Functional abdominal pain syndrome (FAPS) from functional bowel disorders (Category C) into its own category (Category D). This is based on the growing evidence that FAPS relates more to CNS amplification of normal regulatory visceral signals rather than functional abnormalities *per se* within the GI tract. The committee members selected for this new category included psychologists, psychiatrists and gastroenterologists involved in brain gut interactions.

Criteria changes

In Rome III, functional dyspepsia is de-emphasized as an entity for research, due to its symptom heterogeneity. Instead, the gastroduodenal committee has recommended using an umbrella term "dyspepsia symptom complex" which is subclassified into two conditions that may overlap: (1) Postprandial Distress Syndrome, and (2) Epigastric Pain Syndrome. Although similar to the

dysmotility like and ulcer like dyspepsia in Rome II, there now are several items for the criteria derived from factor analytic studies and physiological support instead of being based on the single symptom of epigastric discomfort or pain. Further studies are needed to validate this change. Functional biliary tract disorders have been a challenging group of disorders to diagnose and treat. These disorders are of low prevalence in comparison to other FGIDs, but they tend to be investigated with invasive and risky studies, such as endoscopic retrograde pancreatography (ERCP) or sphincter of Oddi manometry, and treated with unnecessary endoscopic sphincterotomy and surgery. Rome III recommends more restrictive evaluation of these disorders.

Rome III is the single most comprehensive and authoritative resource on the subject of FGIDs. It is readable, well organized, clearly labeled, and extensively referenced. The 82 experts who participated in the Rome III process have created an outstanding work from which clinicians, clinical investigators, basic scientists, mental health providers, the pharmaceutical industry and, most of all, patients with FGIDs will greatly benefit.

CONCLUSION

The information obtained in Rome III is comprehensive although certainly not complete. It is likely that the next few years will bring considerable advances in our understanding and treatment of these disorders, and when that occurs, revision of such information should be planned before moving to Rome IV.

Brain imaging, using positron emission tomography, functional magnetic resonance imaging, or other modalities (Drossman 2005, Hobson 2004, and Hobson 2005) provides an opportunity to assess brain function in response to visceral stimulation (Kern 2002, Yaguez 2005) among healthy subjects and patients with FGIDs. Developing standardization for brain imaging assessment and making recommendations relating to symptom severity for research and clinical care should be emphasized in the next edition.

REFERENCES

- 1 **Drossman DA.** Brain imaging and its implications for studying centrally targeted treatments in irritable bowel syndrome: a primer for gastroenterologists. *Gut* 2005; **54**: 569-573
- 2 **Hobson AR, Aziz Q.** Brain imaging and functional gastrointestinal disorders: has it helped our understanding? *Gut* 2004; **53**: 1198-1206
- 3 **Hobson AR, Furlong PL, Worthen SF, Hillebrand A, Barnes GR, Singh KD, Aziz Q.** Real-time imaging of human cortical activity evoked by painful esophageal stimulation. *Gastroenterology* 2005; **128**: 610-619
- 4 **Kern MK, Shaker R.** Cerebral cortical registration of subliminal visceral stimulation. *Gastroenterology* 2002; **122**: 290-298
- 5 **Yaguez L, Coen S, Gregory LJ, Amaro E Jr, Altman C, Brammer MJ, Bullmore ET, Williams SC, Aziz Q.** Brain response to visceral aversive conditioning: a functional magnetic resonance imaging study. *Gastroenterology* 2005; **128**: 1819-1829

S- Editor Li DL L- Editor Wang XL E- Editor Lu W