A 21st Century Look at the Spectrum of Gastrointestinal Motility Disorders. What is Dysmotility; What is Functional?

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KEYWORDS

- Digestive physiology • Esophageal manometry
- Gastrointestinal motility • Functional colonic diseases
- Functional gastrointestinal disorders • Esophageal disease
- Signs and symptoms

Gastrointestinal motility disorders affect the neuromuscular functions needed for movement of contents through the gastrointestinal tract. This definition excludes strictures and other mechanical causes for impaired passage from the concept of motility disorders. Functional gastrointestinal disorders (FGID), on the other hand, have traditionally been believed to arise from a gastrointestinal tract with an intact neuromuscular function. Most definitions of FGID include the absence of structural changes, but the depth of the search for such changes has varied. The latest version of the Rome Criteria for functional bowel disorders states that "research will likely confirm that functional gut disorders manifest such (structural or biochemical) findings".[1]

Our view is that motility disorders and functional disorders should be regarded as 2 different vectors for classifying patients, one physiologic that relies on measuring dysmotility and the other a symptom vector describing the subjective sensations of disordered function. In some instances, symptoms follow from a well-defined state of dysmotility, which, in turn, can have a well-defined underlying pathology. This is the case, for example, with achalasia. The events leading to degeneration of nitric oxide producing neurons and the resultant inability of the lower esophageal sphincter to relax on swallowing, thus leading to dysphagia, chest pain, and regurgitation, are multiple and varied. Still, we recognize achalasia as a typical motility disorder. In other instances, symptoms like diarrhea or abdominal

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distension cannot be ascribed to a particular physiologic disturbance, and our current methods do not allow us to detect an underlying pathology. This does not necessarily mean that no such pathology exists; it may instead reflect the inability of our current methods to detect abnormalities.

SYMPTOM-BASED DIAGNOSIS—THE FUNCTIONAL MAINSTAY

The perception of ill health reported by the patient when consulting a physician is the basis for all diagnostic decision making except in certain emergency situations. The combined outcome of how the individual physician judges the medical history and the results of diagnostic tests and treatment trials affects the way a diagnosis is seen. Traditionally, what cannot be seen, measured, or assessed by a positive treatment response is regarded as less confirmative of a "real" disease compared with diagnoses that are obvious from 1, or preferably all 3, of these viewpoints. Even if empiric treatment is the mode of diagnosis, we tend to accept it as proof for somatic disease without too much hesitance, as long as there is a symptom improvement, as is the case with acid suppression for reflux symptoms.

A major problem regarding the 28 adult FGIDs as defined today[2] is that most of them do not, in any convincing way, meet our traditional view of clinical diagnoses. In the first instance, the labeling of FGIDs as disorders creates some confusion because this is a common term in psychiatry but not in somatic medicine. The routine practice to exclude organic disease before making a diagnosis of a FGID further emphasizes this; rule out "diseases" and the "disorders" are what remains.

During the last 2 decades, the Rome process has changed our ways of thinking about FGIDs quite a lot. The Rome process started out by using consensus of opinion but has developed into a more-or-less worldwide scientific joint venture for creating evidence-based and improved knowledge regarding FGIDs. One of the objectives of the Rome process was to create the means for a positive diagnosis of FGIDs; exclusion of organic disease should no longer be needed. The message from Rome is that clusters of symptoms with a minimum duration of six months and without alarm symptoms can safely be used for diagnosing a benign disorder with a reasonably well-defined prognosis.[2] The dissemination of this strategy, in particular to community providers of health care, may still have a long way to go.[3] Although the stability over time of a given FGID is poor, with FGIDs tending to change labels, eg, from irritable bowel syndrome (IBS) to functional dyspepsia or functional constipation,[4,5] new organic diseases do not appear to develop more often than in the general population.[6–8] The major diagnostic drift stays within the framework defined by FGID.[4] The diagnostic certainty conveyed by symptom criteria is an important step forward in everyday work and a trustworthy basis on which to start in the therapeutic relation with a patient.

Several problems seem inherent to FGID. To start with, those who seek medical advice for FGID have either more severe symptoms than nonconsulting FGID patients or carry more psychological problems, like anxiety, depression, somatization, and general health concerns.[9] It is vital to understand the patient's reasons for seeking medical advice and to also address contributing factors. Medical therapy for FGIDs is hampered by the lack of efficacious drugs. Symptomatic treatment for patients with diagnoses of unknown etiology and uncertain pathophysiology is a challenge. A confident and skilled physician seems to increase the chance for improvement, even if the treatment modes are not particularly effective.[7,10] This is exemplified by the high placebo response to treatment interventions in IBS,[11] which is good for short-term success but may increase the risk for continued use of ineffective drugs unless careful follow-up is performed.