ADVANCES IN IBS

Current Developments in the Treatment of Irritable Bowel Syndrome

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When to Order Anorectal Function Testing

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G&H Why is anorectal function testing important?

AB Anorectal function tests are needed for 2 reasons: to help providers make diagnoses and to facilitate therapy. Anorectal manometry and the rectal balloon expulsion test are the most widely used initial tests, and several anorectal manometry systems are now available. High-resolution intrarectal manometry catheters provide better spatial resolution of the anorectal pressure profile compared with earlier techniques. However, these systems are more fragile and much more expensive without providing more clinically actionable information than non–high-resolution catheters. Some non–high-resolution catheters are portable and can be used to perform manometry at the patient's bedside in a doctor's office. Some non–high-resolution equipment systems can also be used to provide anorectal biofeedback therapy.

G&H What are the different diagnoses that anorectal function testing assists in making?

AB Patients with chronic constipation can be divided into 3 groups: those with normal transit constipation, those with isolated slow transit constipation, and those with defecatory disorders. Unlike patients with the first 2 conditions, patients with defecatory disorders find it difficult to evacuate stool from the rectum. Symptoms alone cannot distinguish among these 3 groups, and the treatments are different. Specifically, defecatory disorders are better managed with pelvic floor biofeedback therapy rather than with laxatives. Thus, anorectal tests are necessary to identify patients who would benefit from this treatment approach.

G&H What are some of the conditions for which anorectal testing may help guide therapy?

AB The best example is in patients with fecal incontinence who may have a variety of anorectal dysfunctions. Manometry assesses anal tone, rectal sensation, and rectal evacuation, and therefore can correctly identify all of the various disturbances. Identifying the specific type of dysfunction is necessary to individualize therapy. Arguably, the most common anorectal disturbance in fecal incontinence is anal weakness. Either the muscle tone is reduced at rest or patients are unable to contract the anal sphincter and/or pelvic floor muscle, especially the puborectalis, sufficiently in order to prevent leakage. Other patients may have reduced or exaggerated rectal sensation, both of which may predispose them to incontinence. Some patients with incontinence have an underlying evacuation disorder. With these patients, if the rectum is not emptied adequately during defecation, then there is an increased proneness to leak stool at other times during the day.

Although fecal incontinence and laxative-refractory chronic constipation are the most common indications for anorectal manometry, it is also important to recognize that large and/or recurrent hemorrhoids and chronic anal fissures may be symptoms of an underlying defecatory disorder. The excessive strain needed to empty stool can predispose patients to these conditions.

G&H Are the test results generally conclusive, or do they need to be combined with other diagnostic methods?

AB In most patients, anorectal manometry, which must be performed with a rectal balloon expulsion test, is sufficient. If the findings are inconclusive and/or differ from the clinical impression and/or if pelvic organ prolapse or mechanical obstruction to defecation are suspected, then defecography (via barium or magnetic resonance imaging) should be performed.

G&H How do you navigate the emotional component of discussing testing for these disorders with your patients?

AB In patients with such symptoms, physicians often need to break the ice and put them at ease. Physicians all have their own methods for doing that. I tell patients that I am "the poop doctor" and that I see many patients who have similar symptoms, which are often distressing. Many patients are embarrassed about fecal incontinence and have not shared their symptoms even with their closest family members or friends, let alone with a physician. Patients often tell me that this is the first time they are acknowledging their symptoms to anyone. However, once their problems are out in the open, patients are typically surprised to hear that their symptoms are common. Patients are also relieved to learn that there may be an explanation for their symptoms, as well as treatments that are safe and effective for many people. I acknowledge that some of my questions may be inconvenient or embarrassing but that they are geared toward identifying the appropriate diagnosis and facilitating treatment. I explain the rationale for a digital rectal examination and anorectal testing, and I walk patients through these tests. Very few, if any, patients will decline testing for anorectal function.

> Patients should eat their fruits and vegetables (5 servings per day) and eat a healthy breakfast to help stimulate the gastrocolic response that is often associated with the desire to defecate.

G&H Are there any important updates in the most recent guidelines?

AB Arguably the biggest difference is that the 2021 guidelines more rigorously evaluated evidence for the Grading of Recommendations Assessment, Development and Evaluation (GRADE) process. For fecal incontinence and defecatory disorders, the latest guidelines are very similar to the prior version, albeit supplemented with more evidence where available. In patients with chronic constipation that is unresponsive to laxatives, anorectal testing is necessary in order to identify defecatory disorders because these disorders are more appropriately managed with anorectal biofeedback therapy than with laxatives. Anorectal testing is also necessary for patients with fecal incontinence that has not responded to simple measures, followed by anorectal biofeedback therapy where appropriate. Selected topics (eg, surgical options for defecatory disorders and chronic anal fissure) are discussed in more detail in the newer guidelines than in the older guidelines.

G&H Do you think anorectal function testing should occur earlier in the process of addressing patients' concerns and symptoms?

AB The timing of testing depends in part on access to these tests and, even more, on access to pelvic floor biofeedback therapy, which is very limited. This limitation is one of the biggest gaps in the care of patients with constipation. The lack of therapists and programs that provide effective biofeedback therapy is a major restriction in appropriately managing these patients.

G&H What happens if these patients are left untreated?

AB With defecatory disorders, the goal of treatment is to improve the coordination between the muscles of the abdomen and the muscles of the pelvic floor. Many patients attempt to overcome dyssynergia or discoordination between the rectum and anal sphincter by straining excessively. However, excessive straining perpetuates discoordination and may, over the long term, weaken the pelvic floor and predispose patients to pelvic organ prolapse and rectoceles.

G&H What is needed to further improve the care of patients with defecatory disorders?

AB More evidence is needed to assess the efficacy of anorectal biofeedback therapy, the role of individualized therapy, and the long-term efficacy of therapy. Clinicians who look after these patients need better access to quality anorectal biofeedback therapy. Hopefully, the availability of portable anorectal manometry biofeedback catheters will facilitate this.

G&H Are there any ongoing studies that exemplify the research you think is needed?

AB There is a study sponsored by the National Institutes of Health currently ongoing at 5 sites across the United States comparing the efficacy of biofeedback therapy and perianal injection with bulking agents for the treatment of patients who have fecal incontinence (ClinicalTrials.gov identifier: NCT03811821). The interventions in this study are very similar to what patients are offered at specialized centers. The study will assess the efficacy of the intervention(s) for up to 2 years. The eligibility criteria are relatively broad, which means that the findings will likely be applicable to patients at large within the community. Therefore, this trial approximates an ideal pragmatic clinical trial.

G&H Alongside effective testing and treatment, how else can patients help prevent any problems from becoming worse or from arising in the first place?

AB Patients should eat their fruits and vegetables (5 servings per day) and eat a healthy breakfast to help stimulate the gastrocolic response that is often associated with the desire to defecate. Patients should not ignore the call to defecate because the rectum will stop reminding them if the call is ignored too often. Patients should avoid straining excessively during defecation. Hard stools are more difficult to expel; when they are a problem, patients should consider increasing their intake of fruits and vegetables or taking a laxative after consulting a physician. Patients should also exercise regularly. Pilates and yoga are very effective methods for preserving the muscles involved in continence.

G&H At what age do defecation disorders typically begin? Can they be hereditary?

AB The limited data currently available and my anecdotal experience suggest that these conditions often begin during childhood. They are seldom hereditary. There is one condition that can be present at birth, Hirschsprung disease, which sometimes runs in families and other times may occur in people with no family history of the disease. Anorectal manometry can be useful in diagnosing this condition.

It is also important to consider that many people with defecatory disorders have comorbid conditions. In a community-based study that my colleagues and I conducted on the rate and characteristics of defecatory disorders, approximately 30% of patients also had inflammatory bowel disease, 44% had depression, and 17% had anxiety.

Disclosures

Dr Bharucha jointly holds patents for an anorectal catheter fixation device, anorectal manometry probe, and an anorectal device for fecal incontinence with Medtronic, Medspira, and Minnesota Medical Technologies, respectively. He receives royalties from Medspira and Minnesota Medical Technologies, as well as an honorarium from GI Supply.

Suggested Reading

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