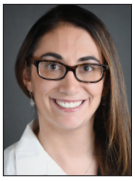
ADVANCES IN IBS

Current Developments in the Treatment of Irritable Bowel Syndrome

Section Editor: William D. Chey, MD

Meditative Movement Approaches for Irritable Bowel Syndrome



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G&H What are meditative movement practices and which ones are being explored for irritable bowel syndrome and other disorders of gut-brain interaction?

ET Meditative movement practices integrate psychological (breathing practices and meditation) and physical (gentle movements) approaches to improve health and well-being. In gastroenterology, meditative movement practices, such as yoga and tai chi, are commonly used alongside medical treatments for managing irritable bowel syndrome (IBS) and other disorders of gut-brain interaction (DGBIs). These practices are one class of complementary and integrative medicine interventions that address the whole person, including the mind, body, and spirit, within the context of biologic, behavioral, environmental, and social factors. Although both yoga and tai chi incorporate common techniques (breathing practices, meditation, and gentle movements), they differ slightly in style and origin. Yoga, which originated from India, involves static and dynamic postures with focused breath control and meditation, whereas tai chi is Chinese in origin and incorporates slow, gentle, flowing movements that emphasize the circulation of energy, or qi (also referred to as chi).

> Both yoga and tai chi have been shown to be safe and feasible in studies that included patients with IBS.

G&H Which meditative movement practices have been shown to be safe and effective in IBS?

ET Both yoga and tai chi have been shown to be safe and feasible in studies that included patients with IBS. For instance, in a 2016 systematic review of 6 randomized controlled trials including 273 patients with IBS, Schumann and colleagues found evidence supporting the benefit of a yoga intervention over conventional treatment, as demonstrated by reductions in gastrointestinal (GI) symptoms, disease severity, and anxiety. In 2 of the 6 trials that reported safety data, there were few adverse events, and all were musculoskeletal related. Studies have shown benefits for individuals with both diarrhea-predominant and constipation-predominant IBS (IBS-C), and for specific symptoms such as abdominal pain and bloating. Although the mechanisms for this remain unclear, potential therapeutic effects of yoga may be related to self-regulation, a reduced stress response, and improvement in psychological symptoms such as anxiety and depression. Additionally, yoga may positively influence immune function and promote anti-inflammatory processes. Although tai chi has been less well-studied, a 2022 study by Staller and colleagues provided preliminary evidence that a virtual tai chi intervention for IBS-C was feasible and improved IBS symptoms; safety was also supported by minimal adverse events.

G&H In what areas are IBS patients likely to experience improvement, and are there other benefits of these approaches?

ET Focusing on yoga, the previously mentioned systematic review by Schumann and colleagues found that participants who practiced yoga reported statistically significant reductions in bowel symptoms, IBS symptom severity, and anxiety compared with those who received conventional treatment. Additionally, improvements were noted in quality of life, global symptom relief, and physical functioning when compared with those who received no treatment. Interestingly, a 2016 study by Shahabi and colleagues showed no statistically significant differences between yoga and walking. This suggests that yoga may be equally effective to exercise and other movement-based interventions for managing IBS symptoms.

It is important to emphasize that yoga is more than just a fitness class, and it can be delivered within a therapeutic context (yoga therapy). Yoga and other meditative movement practices are very intentional. It is the unique combination of meditation, movement, and breath work that fosters well-being and therapeutic benefit. Effective yogic breathing, in particular, is a foundational component of yoga, integrated into every posture; yogic breathing functions as a gut-brain tool that supports autonomic regulation and broader self-regulatory processes. Meditative movement is really about establishing a connection between the gut, brain, and environment, so the effects of yoga extend beyond the physical practice. As a result, yoga not only can improve strength and flexibility, but also can boost mental and physical energy, elevate mood, and improve sleep. The application of yoga in medical contexts is important, as yoga can reduce stress, improve self-regulation, and build resilience, all of which are key contributors to better health outcomes.

G&H Are there any downsides/contraindications to meditative movement practices for IBS?

ET The downsides are generally minimal. It is important to consider individual functional limitations and assess whether certain movements can cause discomfort for patients. In addition, some individuals might experience symptom flare-ups if physical activity is too vigorous, so activity pacing is a key consideration. Fortunately, meditative movement practices such as yoga and tai chi are highly adaptable, and modifications are common; individuals can gradually build tolerance and confidence as their symptoms improve. When incorporating these practices, the patient's ability to perform breathing exercises is also a key factor. According to yoga therapist Dr Amy Wheeler, Chair of Yoga Therapy and the Ayurveda Department at Notre Dame of Maryland University, while many gastroenterology professionals recommend behavioral strategies such as diaphragmatic breathing for GI disorders, there is a subset of patients who struggle to apply it effectively. The primary obstacle is not always the quality of instruction, but rather a physical limitation or restrictive musculature, particularly tight intercostals that restrict thoracic expansion by forming a rigid cage around the lungs. There are targeted yoga postures and breathing techniques that can help release these muscular restrictions and enhance the effectiveness of diaphragmatic breathing.

G&H When should meditative movement practices be considered as part of treatment of patients with IBS?

ET Once the diagnostic workup is complete and a clear diagnosis of IBS is established, gastroenterology professionals can develop a multidisciplinary approach that considers the patient's GI-specific biopsychosocial needs, as conventional pharmaceutical treatments alone are often insufficient. Meditative movement approaches, such as yoga, can serve as a valuable adjunct to conventional treatments, particularly for those patients whose symptoms are influenced by stress, or even if they have certain musculoskeletal restrictions that need to be addressed, as I described. Meditative movement practices can also be adapted therapeutically, as previously noted; yoga therapy can be implemented to address GI-related needs on an individual level. Working with a yoga therapist to address GI-related needs will help personalize yoga practices to support symptom management, functional improvement, and quality of life.

> Meditative movement practices can be integrated into an IBS management plan alongside other behavioral and lifestyle interventions.

G&H How do you approach an IBS patient who you think could benefit from meditative movement practices?

ET These meditative movement practices are likely to be better received by IBS patients who express interest

in nonpharmacologic interventions. It is important to educate patients about what these interventions entail because some patients may be unfamiliar with them. Gastroenterology professionals should share the evidence on the benefits and risks of each intervention, so patients can identify if it is something they want to participate in. Engaging in shared decision-making is ideal to ensure that the treatment aligns with patients' preferences and values and can be incorporated into their day-to-day lives.

G&H How can meditative movement approaches be incorporated into the overall IBS management plan?

ET Meditative movement practices can be integrated into an IBS management plan alongside other behavioral and lifestyle interventions. Gastroenterology professionals can encourage patients to incorporate these practices into their daily routines, whether through online yoga or tai chi classes, working with a yoga therapist, or implementing meditative movement through other gentle physical activities. Consistency, I believe, is key to maximizing benefits. Patients should also be encouraged to track their experiences, note any symptom changes, and adjust the type of practice or the duration and intensity based on their needs. It is important to note that these practices are flexible, and using a patient-centered approach can promote sustainability and empower individuals to take an active role in their own symptom management.

G&H What should be the direction of future research on this topic?

ET In a recent systematic review of yoga for GI disorders, my colleagues and I found that yoga demonstrates promising benefits for a range of GI conditions beyond DGBIs; however, existing research has largely and disproportionately focused on a subset of conditions, especially IBS. Thus, DGBIs and other GI disorders are largely underexplored. There is also a notable lack of standardization of yoga methods across studies. This includes inconsistencies in the type of yoga practices used and a lack of targeted yoga practices to match specific GI conditions. Research is also limited regarding the relative benefits of different yoga therapy components—including specific postures, breathing practices, and meditation techniques—for distinct GI populations, as well as the optimal dosing parameters for effective treatment. Therefore, we need to develop standardized yoga methods that can be adapted to different GI populations and explore an optimal dose and administration of this approach. Similarly, there needs to be more research exploring the potential of other meditative movement practices, like tai chi or qigong, and how these approaches can be integrated with other medical and behavioral approaches. Comparative studies could help identify which approaches are effective for specific conditions, and whether multimodal interventions offer synergistic benefits. For example, if yoga was combined with other behavioral interventions, such as GI-focused cognitive behavioral therapy, what benefit would the combination have over a single behavioral intervention? We might also consider how yoga might be helpful when incorporating it alongside pharmaceutical interventions for patients. These are a few of the questions that hopefully will be answered in the future. Addressing these research gaps will be critical for informing the development and optimization of yoga and other meditative movement interventions for GI populations.

Disclosures

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Suggested Reading

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