

ADVANCES IN IBS

Current Developments in the Treatment of Irritable Bowel Syndrome

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When to Consider Acupuncture for Disorders of Gut-Brain Interaction



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G&H How did acupuncture become a treatment for disorders of gut-brain interaction?

AL Acupuncture has been employed to treat various ailments for thousands of years. More recently, electroacupuncture—a form of acupuncture that incorporates electrical stimulation—has shown promise as a potentially more effective intervention. These treatments have become increasingly popular as safe, nonpharmacologic options for patients who have disorders of gut-brain interaction, including those with symptoms of chronic nausea and vomiting, functional dyspepsia, and irritable bowel syndrome (IBS).

G&H What are the mechanisms of action of acupuncture?

AL Acupuncture's potential effects on disorders of gut-brain interaction primarily involve the modulation of pain, inflammation, and motility through its influence on the nervous, endocrine, and immune systems, including the gut-brain axis. Evidence suggests that acupuncture may act through modulation of the vagus nerve, leading to reduced abdominal pain and improved motility. Further, acupuncture stimulates the release of neurotransmitters and endogenous opioids, which can modulate pain, and exerts anti-inflammatory effects that may alleviate gastrointestinal symptoms.

G&H What evidence is there on the efficacy of acupuncture for patients with different types of disorders of gut-brain interaction?

AL IBS and functional dyspepsia are the disorders of gut-brain interaction that have been the most studied in this area. Although earlier studies, often limited to small single-center trials, have yielded mixed results, recent evidence has been more promising. For instance, a recent large multicenter trial conducted in China included 170 patients with refractory IBS—defined as the absence of response to diet and one conventional pharmacologic agent. This study found significant benefits of acupuncture, with 12 sessions over 4 weeks yielding superior outcomes compared with sham acupuncture. Additionally, acupuncture has been shown to have greater efficacy in reducing IBS symptoms compared with antispasmodic medications. For functional dyspepsia, a meta-analysis of 24 trials involving 3097 patients found that acupuncture not only improved symptoms but also significantly improved patients' quality of life.

Evidence regarding the efficacy of acupuncture therapy in other disorders of gut-brain interaction is limited. For functional constipation, one randomized trial found increased frequency of complete spontaneous bowel movements (CSBMs) after treatment with electroacupuncture. In the study, 1075 patients received either electroacupuncture or sham treatment for 8 weeks. At

the end of the treatment period, 31.3% of patients in the electroacupuncture group vs 12.1% in the sham therapy group had 3 or more mean weekly CSBMs. The rates during weeks 9 to 20 of follow-up were similar for the 2 groups, at 37.7% vs 14.1%, respectively. In a pilot randomized clinical trial that evaluated 90 patients with IBS with diarrhea, acupuncture led to clinically meaningful improvement in symptoms.

G&H How is acupuncture generally performed in these patients?

AL Although most studies with acupuncture use fixed acupuncture points throughout the study duration, in real-world practice, acupuncturists often individualize treatments based on the patient's specific symptoms and their response to therapy. Few studies have compared fixed to individualized acupuncture treatments; however, there may be a slight advantage to individualized acupuncture in terms of patient-reported improvement in symptoms. Most studies typically involve 2 or 3 acupuncture sessions over a period of 4 to 6 weeks.

G&H Which patients are ideal candidates for acupuncture?

AL Ideal candidates for acupuncture are individuals who have refractory symptoms or those who prefer non-pharmacologic treatments and seek a more naturalistic approach. It is important that the patient is open to the idea of acupuncture and does not have an aversion to needles.

G&H When might acupuncture be preferred over transcutaneous neurostimulation, or vice versa?

AL Transcutaneous neurostimulation may be preferred for patients who are apprehensive about needles. However, its application in disorders of gut-brain interaction is less well-studied compared with acupuncture. Both modalities have the potential to modulate pain, improve motility, and reduce inflammation.

G&H What are the main reasons for considering acupuncture for a patient with a disorder of gut-brain interaction?

AL Acupuncture is an appealing therapeutic option for a patient who has a disorder of gut-brain interaction owing to its well-established safety profile and minimal side effects. Acupuncture offers a holistic approach that addresses the multidimensional nature of disorders of

gut-brain interaction, including physical symptoms, stress reduction, and overall quality of life. However, it is important to emphasize that acupuncture is best utilized as adjunctive therapy alongside conventional treatments to achieve optimal outcomes.

Clinicians can incorporate acupuncture into their practice by educating patients about its mechanisms, potential benefits, and role as an adjunctive therapy for managing disorders of gut-brain interaction.

G&H How does acupuncture compare with conventional treatment and other types of lifestyle treatments (complementary and alternative medicine)?

AL As I mentioned, acupuncture is most effective when used as an adjunct to lifestyle modifications, such as dietary changes, stress management, and pharmacologic treatments when needed. Although few studies have directly compared acupuncture with other treatments for disorders like IBS, available evidence suggests that acupuncture is comparable to behavioral therapy and antispasmodic medication in symptom management.

G&H What factors should be accounted for when considering acupuncture?

AL The most important factors to consider include treatment availability and expertise, patient preference and willingness to try nontraditional treatments, and patient symptoms and comorbid conditions.

G&H How can clinicians incorporate acupuncture into their practice?

AL Clinicians can incorporate acupuncture into their practice by educating patients about its mechanisms, potential benefits, and role as an adjunctive therapy for

managing disorders of gut-brain interaction. Additionally, establishing collaborative relationships with board-certified acupuncturists ensures patients receive high-quality, professional care.

G&H What should future research on this topic focus on?

AL Additional large multicenter trials are needed to better understand the efficacy of acupuncture and potential subgroups that may benefit. Further studies are also needed on the mechanism of action of acupuncture in disorders of gut-brain interaction.

Disclosures

Dr Lembo has been a consultant for Aeon, Ardelyx, Cara Care, Gemelli Biotech, Gimoti, Ironwood Pharmaceuticals, Neurogastrx, OrphoMed, Takeda, and Vibrant Pharma; and has stock in Allurion Technologies, Bristol Myers Squibb, and Johnson & Johnson.

Suggested Reading

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