What are the most effective nonpharmacologic therapies for irritable bowel syndrome?

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Evidence-based answer

Herbal formulations, certain probiotics, elimination diets based on immunoglobulin G (IgG) antibodies, cognitive behavioral therapy, and self-help books have been shown to decrease global symptoms of irritable bowel syndrome (IBS) and improve overall quality of life (strength of recommendation [SOR]: **B**). For patients with severe refractory IBS, hypnosis has been shown to relieve symptoms (SOR: **B**). Soluble fiber is more effective than insoluble fiber at improving global IBS symptom ratings (SOR: **C**).

Clinical commentary

Be positive with your patients—it's potent therapy

What do you do for your patients when their bodies speak for them—for their difficult emotions, personal problems, or broken relationships? Expressing positive regard in a safe, dependable doctor-patient relationship is your most potent therapy. Once your patient knows you care for them—and

they are confident their diagnosis is troublesome but innocent—their symptoms may abate and spare them unnecessary workups. Encouraging them to address their intrapersonal or interpersonal issues through writing in a journal, meditative prayer, and relaxation breathing will help them take control of their symptoms.

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Evidence summary

Herbs and probiotics may help. A Cochrane review of herbal therapies evaluated 75 randomized controlled trials (RCTs), including 7957 patients; it concluded that some herbal preparations may reduce symptoms of IBS. However, more rigorous studies are needed: There was never more than 1 trial comparing a given herbal medicine with a specific control, making it difficult to combine trials in a meaningful way.¹

A multicenter RCT compared 2 herbal formulations with placebo.² The first contained extracts of bitter candy-

tuft, chamomile, peppermint, caraway, and licorice. The second, a commercial preparation called Iberogast, had the same ingredients as the first, as well as lemon balm, celandine, angelica, and milk thistle. The study demonstrated global IBS symptom reduction, with a relative risk [RR] of 1.68 (99% confidence interval [CI], 1.00–2.8) for Iberogast, and RR=1.90 (99% CI, 1.15–3.14) for the first formulation. Both formulations were well tolerated and more effective than placebo in the treatment of IBS, regardless of the dominant symptom.

One RCT compared the probiotic formula *Bifidobacterium infantis* 35624 with

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80% of patients said hypnosis relieved IBS

Lactobacillus and placebo, and found that IBS symptom scores and quality of life measures were better with the *Bifidobacterium* preparation (*P*<.05).³

Soluble fiber or an elimination diet can reduce symptoms. A systematic review of 17 RCTs (9 of soluble fiber, 8 of insoluble) (N=1363) found soluble fiber more effective than placebo (pooled RR=1.55; 95% CI, 1.35–1.78) for reduction in global symptoms and constipation.⁴ Insoluble fiber was no better than placebo (pooled RR=0.89; 95% CI, 0.72–1.11). Abdominal pain was not reduced with either fiber.

An elimination diet, based on the presence of IgG antibodies to various foods, was compared with a sham diet in an RCT.⁵ Those who fully adhered to the diet reported symptom reduction, with a mean symptom score 98 points lower (95% CI, 52–144; NNT=2.5). (A 50-point drop was considered clinically significant.)

Therapy, self-help book, and hypnosis provide relief. A single-blinded study comparing cognitive behavioral therapy (CBT) with patient education alone found CBT more effective.⁶ The effect size was 0.50 (defined as moderate; 95% CI, 0.2–0.8). Analysis of response rates found that 73% responded to CBT vs 41.3% in the education group (NNT=3.2).

Another RCT tested the use of an educational self-help guidebook.⁷ Outcomes were symptom score, perception of improvement, and primary care consultation rates. At 1 year, the self-help guidebook group had 1.56 visits/year less than the control group (95% CI, 1.15–1.98), a 60% decrease. The self-help guidebook group reported a higher degree of perceived improvement, with a mean effect of 0.51 (95% CI, 0.23–0.79); there were no differences in severity scores.

Hypnosis has been evaluated in several studies. A systematic review found 6 studies with a control and 8 without, for a total of 644 patients. An average of 80% of the patients reported global IBS symptom relief. Patients with typical IBS responded to hypnosis; however, males with diarrhea-predominant symptoms,

and all subjects with atypical symptoms or comorbid psychopathology were less likely to respond.8

Recommendations from others

The American College of Gastroenterology⁹ recommends behavioral therapies (such as relaxation therapy, hypnotherapy, and psychotherapy) for the treatment of individual IBS symptoms. They also report that bulking agents such as insoluble fiber (eg, wheat bran) and soluble fiber (eg, psyllium) are no more effective than placebo at relieving global IBS symptoms.

The American Gastroenterological Association¹0 endorses multiple nonpharmacological treatments for IBS, including therapeutic physician-patient relationship, patient education, dietary and lifestyle modifications, symptom monitoring, and behavioral therapies. ■

References

- Liu J, Yang M, Liu Y, Wei M, Grimsgaard S. Herbal medicines for treatment of irritable bowel syndrome. Cochrane Database Syst Rev 2006; (1):CD004116.
- Madisch A, Holtmann G, Plein K, Hotz J. Treatment of irritable bowel syndrome with herbal preparations: results of a double-blind, randomized, placebo-controlled, multi-centre trial. Aliment Pharmacol Ther 2004; 19:271–279.
- O'Mahony L, McCarthy J, Kelly P, et al. Lactobacillus and bifidobacterium in irritable bowel syndrome: symptom responses and relationship to cytokine profiles. Gastroenterology 2005; 128:541–551.
- Bijerk C, Muris J, Knottnerus J, Hoes A, De Wit N. Systematic review: the role of different types of fibre in the treatment of irritable bowel syndrome. *Aliment Pharmacol Ther* 2004; 19:245–251.
- Atkinson W, Sheldon T, Shaath N, Whorwell P. Food elimination based on IgG antibodies in irritable bowel syndrome: a randomized controlled trial. Gut 2004; 53:1459–1464.
- Drossman D, Toner B, Whitehead W, et al. Cognitivebehavioral therapy vs. education and desipramine vs. placebo for moderate to severe functional bowel disorders. Gastroenterology 2003; 125:19–31.
- Robinson A, Lee V, Kennedy A, et al. A randomized controlled trial of self-help interventions in patients with a primary care diagnosis of irritable bowel syndrome. Gut 2006; 55:643–648.
- Tan G, Hammond D, Gurrala J. Hypnosis and irritable bowel syndrome: a review of efficacy and mechanism of action. Am J Clin Hypnosis 2005; 47:161–178.
- American College of Gastroenterology Functional Gastrointestinal Disorders Task Force. Evidencebased position statement on the management of irritable bowel syndrome in North America. Am J Gastroenterol 2002; 97(11S):S1–S5.
- American Gastroenterological Association. American Gastroenterological Association medical position statement: Irritable bowel syndrome. Gastroenterology 2002; 123:2105–2107.