Cochrane for Clinicians

Putting Evidence Into Practice

Herbal Medicines for Functional Dyspepsia

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Clinical Question

Are herbal medicines effective in treating adults with functional dyspepsia?

Evidence-Based Answer

STW 5 (Iberogast), peppermint plus caraway oil, and turmeric (*Curcuma longa*) may be effective in improving symptoms of functional dyspepsia without significant adverse events.[1] Peppermint plus caraway oil and turmeric may also improve quality of life in patients with functional dyspepsia.[1] (Strength of Recommendation: B, meta-analysis of low-quality randomized controlled trials [RCTs].)

Practice Pointers

Functional dyspepsia is a common functional gastrointestinal disorder characterized by one or more of the following Rome IV criteria: postprandial fullness, early satiety, epigastric pain, and epigastric burning severe enough to interfere with usual activities at least 3 days per week over the previous 3 months, starting at least 6 months before presentation. The prevalence of functional dyspepsia is about 10% in the United States, the United Kingdom, and Canada.[2] The pathophysiology of functional dyspepsia is complicated and poorly understood. Conventional treatment options include pharmacologic agents such as histamine H_2 blockers, proton pump inhibitors, prokinetic agents, tricyclic antidepressants, mucosal protectants, serotonin type 4 receptor agonists, and antispasmodics.[3,4] Complementary and alternative medicine treatments, including herbal products, have become increasingly popular in treating functional dyspepsia.[4,5] The authors of this Cochrane review sought to determine the effectiveness and safety of herbal medicines in adults with functional dyspepsia.

This Cochrane review included 41 RCTs with 4,477 patients 18 years and older and 27 unique herbal products. The length of follow-up ranged from 2 to 12 weeks. Herbal medicines were compared with a placebo, used as a single agent, combined with other agents, and compared with conventional therapeutics such as acid suppression agents or prokinetics. Studies were conducted in Iran, Germany, and other countries; only one study was performed in the United States. The primary outcome evaluated was global symptoms of dyspepsia, measured by a validated score or scale, such as the gastrointestinal symptom score or the severity of dyspepsia assessment scale. Secondary outcomes were adverse events and quality of life measured by validated scales, such as the Nepean Dyspepsia Index and the Glasgow Dyspepsia Severity Score. Studies of most herbal products found no difference when compared with placebo.

Six studies with 970 patients compared Iberogast and placebo over 4 to 12 weeks. Five studies with 814 patients demonstrated that Iberogast improved global symptoms of dyspepsia (mean difference [MD] = −2.6; 95% CI, −4.4 to −0.9). Two studies with 324 patients using a responder analysis (an increased responder rate is a clinically meaningful difference, such as a greater than 20% to 50% improvement in gastrointestinal symptom scores) showed that Iberogast may increase the responder rate (absolute risk reduction [ARR] = 23%; 95% CI, 0.8% to 58.2%; number needed to treat [NNT] = 5; 95% CI, 2 to 125). No differences in quality-of-life scores or adverse events were found.

Three studies with 305 patients compared peppermint plus caraway oil vs. placebo during a 4-week follow-up. All three studies showed peppermint plus caraway oil improved global symptoms of dyspepsia (ARR = 28.4%; 95% CI, 16.1% to 43.5%; NNT = 4; 95% CI, 2 to 6). There was little to no difference in reported adverse events. One study with 99 patients showed probable improvement in quality of life (MD = −131.4; 95% CI, −193.8 to −69.0).

Three studies with 190 patients compared turmeric with placebo during a 4-week follow-up. Two studies with 110 participants showed a moderate improvement in global symptoms of dyspepsia (MD = −3.3; 95% CI, −5.8 to −0.8). One study with 76 patients showed an improvement in global symptoms of dyspepsia (ARR = 26.3%; 95% CI, 3.2% to 47.4%; NNT = 4; 95% CI, 2 to 31). One study with 89 patients showed a small improvement in quality of life (MD = 0.05; 95% CI, 0.01 to 0.09) without an increase in adverse events.

These are summaries of reviews from the Cochrane Library.

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CME This clinical content conforms to AAFP criteria for CME.
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The overall GRADE of the evidence was low certainty due to the limited number of patients and the higher risk of bias in the included studies. The American College of Gastroenterology's clinical guideline recommends rikkunshito—an agent not described in this review—for the treatment of functional dyspepsia and states that other herbal medicines besides rikkunshito may be effective.[6] Considering the lack of highly effective treatments for this condition, primary care physicians may consider shared decision-making for the role of herbal medicines with patients who are interested in alternative treatment options, particularly when conventional therapies have been ineffective.

Editor's Note: The absolute risk reductions and associated numbers needed to treat and CIs reported in this Cochrane for Clinicians were calculated by the authors based on data provided in the original Cochrane review.

The practice recommendations in this activity are available at https://www.cochrane.org/CD013323.

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Remotely Delivered Psychotherapy for Treating Chronic Pain

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Clinical Question

Does remote delivery of psychological therapies reduce pain and disability and improve quality of life in adults with chronic pain?

Evidence-Based Answer

Remotely delivered cognitive behavior therapy reduces pain intensity and improves functional ability compared with treatment as usual.[1] (Strength of Recommendation: B, moderate-quality evidence from randomized controlled trials.) However, the benefit does not persist at follow-up, and more research is needed to assess other forms of therapy, such as acceptance and commitment therapy, and the effectiveness of psychotherapy as an adjunct treatment.

Practice Pointers

Chronic pain affects the daily life and work of more than 20% of the U.S. population.[2] People with chronic pain are at greater risk of depression, dementia, substance abuse, and suicide.[3] A previous Cochrane review demonstrated that face-to-face psychotherapy results in sustained improvement in chronic pain.[4] Addressing chronic pain may also require a multidisciplinary approach that includes psychotherapy.[5]

This Cochrane review evaluated whether remote delivery of psychotherapy improves pain, disability, and quality of life and whether it causes any unintended harm.[1] The review included 32 randomized controlled trials and 4,924 patients, with studies comparing cognitive behavior therapy or acceptance and commitment therapy with treatment as usual, defined as the standard support typically available. Participants were adults with a range of chronic pain conditions, but those with headaches were excluded. The average age of participants was 24 to 67 years. Treatment duration ranged from 3 to 24 weeks. The five studies that included follow-up collected data for 3 to 12 months after the treatment ended. The authors reported the data as a standardized mean difference (SMD) because multiple outcome measures were used in the studies. A SMD of 0.2 represents a small, clinically significant difference between groups; 0.5 is a moderate difference; and 0.8 is a large difference. All the treatments studied were delivered online as stand-alone therapy and were performed in many countries, including the United States and Canada.

Online cognitive behavior therapy improved pain intensity compared with treatment as usual (SMD = −0.3; 95% CI, −0.4 to −0.2). Online therapy also improved functional disability vs. treatment as usual (SMD = −0.4; 95% CI, −0.5 to −0.2). Cognitive behavior therapy delivered remotely was more likely to provide a 30% reduction in pain intensity (number needed to treat = 8; 95% CI, 5 to 14) and a 50% improvement in pain intensity (number needed to treat = 35; 95% CI, 12 to 333) on completion compared with treatment as usual.

At assessments performed 3 to 12 months after treatment, patients who received remote therapy were no better or worse than patients who received treatment as usual. The data were insufficient to assess the value of remote therapy for quality of life or therapies other than standard cognitive behavior therapy. Very low-certainty evidence suggested that remote therapy may dramatically increase adverse

effects (34% risk among patients receiving online cognitive behavior therapy vs. 6% receiving treatment as usual; RR = 6; 95% CI, 2.2 to 16.4; one study; 140 participants). It was not clear what those adverse effects were.

Guidelines recommend psychotherapy for the treatment of chronic pain but do not state whether face-to-face treatment or remote treatment is more effective.[5] Research about whether remote treatments are helpful in combination with other therapies is ongoing, and further research may change these conclusions.

Editor's Note: The numbers needed to treat and associated CIs reported in this Cochrane for Clinicians were calculated by the authors based on data provided in the original Cochrane review.

The practice recommendations in this activity are available at https://www.cochrane.org/CD013863.

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