

HerbClipTM

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FILE: Peppermint Oil (Mentha x piperita)

Irritable Bowel Syndrome
Gastrointestinal Tract

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RE: Review of Trials Shows Peppermint Oil Capsules to be Effective in Treating IBS

Grigoleit HG, Grigoleit P. Peppermint oil in irritable bowel syndrome. *Phytomed*. 2005;12:601-607.

Irritable bowel syndrome (IBS) is a disorder of the gastrointestinal tract that is characterized by constipation, diarrhea, and abdominal cramps resulting from intestinal spasms. Although IBS is widespread, there are relatively few safe and effective treatments for its symptoms. Peppermint (*Mentha* x *piperita*) oil is used as a treatment for IBS in herbal medicine.

The authors reviewed 15 clinical trials on peppermint oil in the treatment of IBS, emphasizing the safety and cost effectiveness of peppermint oil therapy. They also reviewed an article on abdominal pain in children. The 15 clinical trials enrolled a total of 651 patients and lasted from two weeks to six months. Nine clinical trials were randomized double-blind crossover studies, five were randomized double blind parallel group studies, and two were open label studies. In the clinical trials, peppermint oil was compared to placebo (n=12), psychotherapy (n=1), and anti-cholinergic smooth muscle relaxants (n=3). Thirteen trials included enteric-coated peppermint oil capsules, and three trials did not specify the formulation. The authors used "overall success" to compare the studies in order to account for study method variations.

The placebo response was in the range of 10-52% for all studies; the average placebo response was 29%. Of the 12 placebo-controlled trials, eight showed a statistically significant positive effect for peppermint oil over the placebo. The nine double-blind crossover trials showed peppermint oil efficacy in the range of 39-79%, with an average positive response rate of 58%. The two open label studies showed mixed results: the range of positive response to peppermint oil treatment was 18-93%. Three double blind crossover studies comparing peppermint oil to smooth muscle relaxants did not show significant differences between the two types of treatments in terms of efficacy. The authors conclude that "[t]here is reasonable evidence that enteric-coated peppermint oil, 180-200 mg t.i.d.,

given for 2-4 weeks, in IBS is efficacious as compared to placebo and the smooth muscle relaxants investigated."

Adverse event reports associated with peppermint oil were generally mild and transient and included heartburn (n=14) and anal discomfort or burning (n=26). Tolerance in the study on children and abdominal pain was "good". A total of 71 patients dropped out of the 15 clinical trials, 58 dropouts were unrelated to the study medications. Six patients dropped out due to worsening of symptoms, nausea, vomiting, perianal burning, peppermint taste, and heartburn.

The bulk of the clinical evidence shows that peppermint oil enteric-coated capsules are a safe and effective short-term treatment for the symptoms of IBS. The wide response ranges listed above may be partially due to the fact that IBS has multiple causes. Peppermint oil therapy is more cost effective and is associated with a lower risk of adverse events than conventional drug treatments available for IBS. The authors conclude that peppermint oil "...may be the drug of choice in IBS patients with non-serious constipation or diarrhea to alleviate general symptoms and improve quality of life."

-Marissa Oppel, MS

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