

Gut Treatment Protocols: GERD, IBD & IBS, Part 4

Peppermint oil is a kind of a medical food supplement that's shown promise in studies for relieving the symptoms of IBS. The active ingredient is L-menthol. It has anti-inflammatory and antioxidant properties, and it's been shown to decrease gas, bloating, and pain and increase stool consistency and frequency. It's cheap and the side effects are indistinguishable from placebo. It's readily available from the internet and in health food stores; however, there is a proprietary formulation called IB Guard that may be more effective. Peppermint oil is formulated into individually enteric-coated sustained release microspheres in IB Guard, and then it's delivered preferentially in the small intestine, and it's supposed to only be sold to practitioners, but you can find it pretty easily online.

Second treatment here is gut-directed hypnotherapy. This is a method of hypnotherapy that's been developed specifically for IBS. There are tons of studies on it, and response rate varies from 23 to 73 percent but averages over 50 percent. Six out of seven randomized controlled trials found significant reduction of overall gastrointestinal symptoms, and efficacy was maintained after treatment ceased in four out of five of the studies that did follow-up. There are several mechanisms of action which are thought to revolve around the gut-brain axis. No side effects, completely safe and relatively inexpensive, it can be done with a hypnotherapist or using home recordings. For the home recordings, one good option is recordings from Michael Mahoney, who is the UK hypnotherapist that specializes in gut-directed hypnotherapy, and that's available through the HelpForIBS.com website. If you send your patients to that site, make sure to tell them to ignore the dietary recommendations, or perhaps Michael Mahoney has his own website, you could search for that.

In addition to hypnotherapy, there are a variety of stress management and awareness practices that have been shown to be effective for IBS. These include mindfulness-based stress reduction, deep relaxation techniques, and yoga and tai chi, and I've included a list of these, including resources and links, in the patient handout in the supplemental materials area.

Next thing to consider is probiotics. Now, the evidence is mixed here, but I think that's in large part because different probiotics have been used at different dosages in these trials. And also because of what I said before, the etiology and pathology of IBS is heterogeneous, so not everyone with IBS is going to respond to probiotics in the same way. But most recent large-scale reviews have shown that probiotics provide benefit in IBS. I've found that the safest and most tolerated and most effective overall choice as a probiotic for IBS is soil-based organisms or transit commensals like Prescript-Assist or MegaSporeBiotic. Patients with SIBO, which is one of the main underlying causes of IBS, often don't tolerate probiotics very well, but Prescript-Assist or MegaSpore can not only be an exception, they can actually provide a lot of benefit.

Best probiotics for constipation	Best probiotics for loose stools / diarrhea
Soil-based organisms	Soil-based organisms
Transient commensals	Transient commensals
E. coli Nissle	Saccharomyces boulardii
Lactobacillus plantarum	VSL#3
Bifidobacteria infantis	Elixa

You should also tailor probiotics based on particular symptoms or presentation, so the best probiotics for constipation, according to the literature and clinical experience, are soil-based organisms, transit commensals like the bacillus species in MegaSporeBiotic, E. coli Nissle, which is known as MutaFlor, it's only available in Germany but you can order it there and have it shipped over; Lactobacillus plantarum, which is an ideal bowel support; and Bifidobacteria infantis, which is in a product called Align. The best probiotics for diarrhea tend to be again soil-based organisms and transit commensals, which is another reason why I tend to favor these probiotics, they're multipurpose. Saccharomyces boulardii, very effective for diarrhea, and then the higher-potency lactic acid-based combos like VSL-3 and then Elixa.

Soluble fiber, but not insoluble fiber, that's an important distinction again, has been shown to provide benefit in IBS. It soothes and regulates the digestive tract, stabilizes the intestinal contractions resulting from the gastrocolic reflex, and normalizes bowel function from either extreme. Soluble fiber also feeds beneficial bacteria and is particularly important if a patient is consuming a low-FODMAP diet. So a lot of the soluble fibers, like citrus pectin or glucomannan, for example, are not considered to be FODMAPs, but they do feed beneficial bacteria, so that's one way you can offset the potential downside of a long-term low-FODMAP diet is by having the patient supplement with soluble fibers. The best preferred and tolerated form in my experience is partially hydrolyzed guar gum, or PHGG. This is non-viscous, it doesn't form a gel in water like most soluble fibers, and therefore it doesn't cause bloating as much and compliance is better because it just tastes like clear water once it's mixed, and it can be mixed very easily with food. Another is glucomannan, which is from konjac root, citrus root, acacia, and cilium, those are all soluble fibers. I would say the number one best tolerated would be PHGG, partially hydrolyzed

guar gum, and number two would be glucomannan, then probably citrus pectin and acacia, and cilium would be last.

Rifaximin, as I mentioned earlier, can also be used to treat IBS, even if SIBO is not present. A 2015 study found that rifaximin produced significant improvement in global symptom relief compared to placebo, 41 percent versus 23 percent. It led to improvements in abdominal bloating, distention, and flatulence. Dr. Mark Pimentel, who I had on the podcast, did a study where he reported that over 75 percent of subjects who initially responded to rifaximin also responded to further retreatment with no significant reduction of benefit with successive treatments. So I'd try everything else that we talked about, both in addressing the underlying causes and also in addressing the symptoms which we just mentioned, before resorting to rifaximin, but it can be very effective, and it's safe. As I mentioned previously, IBS-D is really one of the only conditions that rifaximin has been approved for, and you can get insurance coverage for outside of hepatic encephalopathy.

Relief for **gas, bloating, spasms & pain**



Let's talk about relief for specific symptoms. The first is gas, bloating, spasms, and pain. Iberogast is the #1 choice here. We've already discussed it. It can be very effective. Another is peppermint oil capsules which relax smooth muscle, and just a warning here, if the patient has reflux, don't use peppermint oil capsules because it can aggravate it. Ginger is another time-tested remedy. Ginger tea in particular can be helpful and then Atrantil, as I mentioned earlier, can be used empirically for bloating and discomfort.

Constipation **remedies**

Intervention	Notes
Magnesium glycinate	200–600 mg/d (caution with higher doses over long term)
Magnesium citrate (e.g. Natural Calm)	1–2 tsp before bed; can also help with sleep
Soluble fiber	Glucomannan, PHGG, citrus pectin, acacia (as directed by manufacturer; start slowly & build up)
Probiotics	L. plantarum, B. infantis, SBOs, kefir, fermented foods (start slowly and build up)
Vitamin/electrolyte blend (e.g. Ageless Hydro-C)	Vitamin C, Mg, K, Ca (as directed on website/bottle)
Prokinetics	Iberogast, MotilPro, LDN, low-dose erythromycin
Ozonated magnesium	i.e. Mag 07 (as directed; avoid long-term use)
Atrantil	2 capsules three times a day

So, here's a summary of the constipation remedies: Magnesium glycinate, maybe magnesium citrate like Natural Calm, soluble fiber, probiotics, vitamin electrolyte blend like Ageless Hydro-C, prokinetics like Iberogast, MotilPro, LDN, or low-dose erythromycin, ozonated magnesium like Mag07 but avoid long-term use there, and then Atrantil. And again, the doses are on the previous slides and on the summary table on this slide.

Soluble fibers that we've discussed are also helpful for constipation, specific probiotics for constipation that we've already discussed, including fermented foods like kefir. Vitamin/electrolyte blends like Ageless Hydro-C, which are a combination of a high dose of vitamin C and then minerals like magnesium, potassium, and calcium, can be helpful, and you can see their extensive directions on the website for how to use it. Prokinetics like Iberogast, MotilPro, and LDN (low-dose naltrexone) and low-dose erythromycin, which we talked about in the SIBO unit, can be helpful, and then last, there are these ozonated magnesium products, which are just extremely concentrated doses of magnesium, and they will have more of a laxative effect, and I can't find much information about these products. I'm a little nervous about patients using them, especially in the long term, but in the short term they seem to work pretty well, and I haven't seen any significant adverse effects.

Interventions for **loose stool/diarrhea**

Interventions	Notes
Soluble fiber	Glucomannan, PHGG, citrus pectin, acacia (higher doses may be required)
Probiotics	SBOs, transient commensals, S. Boulardii, VSL#3, Elixia (as directed by manufacturer)
GAPS diet	See IBD section for more info
Rifaximin	May be taken repeatedly if necessary (for IBS-D, start with 10-14 day course)

Okay, for diarrhea or loose stool, soluble fiber is also beneficial; it works in both constipation and diarrhea. Probiotics, again the specific ones for diarrhea that we talked about before. A GAPS diet can be really helpful, and were going to talk a little more about that in the IBD section that's coming up, and then rifaximin, IBS-D is one of the only indications that it's approved for by the FDA, and it can be taken repeatedly if necessary, so for IBS-D the typical place to start and again what it's approved for is, I believe, a 14-day course of 550 milligrams three times a day, and then up to two 14-day periods of retreatment are approved.

Summary of recommendations for IBS

Intervention	Comments
Modified Paleo diet	Avoid gluten & grains; regulate insoluble fiber and FODMAPs
Peppermint oil	Over-the-counter formulations, or IBgard
Stress management	Gut-directed hypnotherapy, mindfulness-based stress reduction (MBSR), etc.
Probiotics	Should be customized according to patient symptoms
Soluble fiber	Soothes digestive system and improves stool frequency and consistency

All right, here's the summary of recommendations for IBS: a modified Paleo diet, avoiding gluten and grains, especially if the patient's gluten intolerant; regulating insoluble fiber and FODMAPs; peppermint, either over-the-counter formulations or IB Guard; stress-management techniques like gut-directed hypnotherapy, mindfulness-based stress reduction, etc.; probiotics, which should be customized according to patient symptoms; and then soluble fiber, which soothes the digestive system and improves stool consistency and frequency.