

Gut Treatment Lifestyle & Behavioral Review

LIFESTYLE AND BEHAVIORAL MODIFICATIONS FOR ADDRESSING GASTROINTESTINAL ISSUES

It is helpful to keep in mind that the gut is just one big bundle of nervous system tissue. In fact, the gut has been referred to it as the second brain. There is 400 times more serotonin produced in the gut than in the brain and 500 times more melatonin produced in the gut than in the pineal gland.

“I HAVE A GUT FEELING”

There is a family of peptides called corticotropin-releasing factors, CRF, that are responsible for coordinating the body's response to stress, and CRFs have potent effects on the gut through modulation of inflammation, increase of gut permeability, contribution to visceral hypersensitivity, increased perception of pain, and modulation of gut motility. Stress also changes the composition of the microbiota, possibly due to the changes in neurotransmitter and inflammatory cytokine levels. Given this, stress reduction and stress management is a crucial component of any gut healing program.

THREE MODALITIES TO BE PARTICULARLY HELPFUL FOR GUT-RELATED PATHOLOGIES:

1. Mindfulness-based stress reduction, in particular the body scan
2. Acupuncture
3. Hypnotherapy for IBS

MINDFUL EATING:

- Eating in a way that supports healthy digestion.
- Encourage your patients to minimize distractions while eating, so not eating while they're in the car on the way to work, while watching TV, or using the computer.
- Advising them not to eat when they're very upset or in a fight-or-flight type of response.
- Taking several moments to relax and breathe and slow down a little bit before eating.

1	2	3	4	5
Take smaller bites of food to begin with (<i>easier to chew smaller pieces</i>)	Chew slowly and steadily	Chew until your mouthful of food is liquefied or lost all of its texture	Finish chewing and swallowing completely before taking another bite of food	Wait to drink fluids until you've swallowed

- Another tip is to eat only until about three-quarters full.
 - Leaving some room in your stomach makes it easier to process your food.
- Proper sleep is crucial to digestion.
- Exercise can also be helpful for patients with GI conditions.

SUMMARY OF BEHAVIOR AND LIFESTYLE MODIFICATION RECOMMENDATIONS

Intervention	Comments
Manage stress	MBSR, acupuncture, hypnotherapy
Eat mindfully	Chew food well, eat in relaxed environment until only 3/4 full
Get adequate sleep	7-8+ hours recommended
Exercise appropriately	Depends on overall health status of patient

Gut Treatment Advanced Treatments Review

These are only recommended when the patient is still not better after everything we have previously discussed in this ADAPT course.

PROBIOTIC AND PREBIOTIC IMPLANTS:

- Can be appropriate for patients who can't tolerate oral prebiotics or probiotics.
- Procedure would be as follows:

1. Purchase a 2-quart natural rubber enema bag with silicone hose.
2. Prepare one-eighth cup of filtered water chamomile tea at about 90 degrees. You don't want it to be too cold or too hot.
 - a. Too cold, the patient won't be able to retain it because it will cause a contraction response in the colon.
 - b. Too hot, it can kill the probiotics.
3. Add maybe a quarter teaspoon of BiotaGen or other prebiotic and one capsule of Prescript-Assist or similar probiotic.
 - a. Can increase these doses over time.
4. Cinch the clip on the enema hose so it's closed.
5. Add the prebiotic/probiotic liquid to the enema bag, hang it on a towel rack or a doorknob in the bathroom.
6. Lie on the left side on the floor, apply coconut oil or other lubricant to the tip of the enema applicator, and insert gently and slowly into the rectum.
7. Gradually release the cinch so that the liquid flows into the rectum, not too quickly. Have them retain it for a minimum of 15 minutes, or if possible, ideally overnight.
8. Can do that three to five times per week before bed.

FECAL MICROBIOTA TRANSPLANT (FMT):

- This is a transfer of stool or its microbial isolates from one human donor to another.
- FDA approved to treat antibiotic-resistant *C. difficile*.
- Studies have suggested it may be effective for other GI conditions such as IBS, possibly IBD, metabolic disease, chronic fatigue, and even depression.

CLINICAL OPTIONS FOR FMT:

1. Send the patient to a clinic outside the United States that offers FMT.
 - a. Taymount Clinic in the UK and Bahamas.
 - i. Pros: Experienced with FMT, professional staff, prescreened donors, comfortable accommodation nearby, rotate donors for a particular patient to get microbiota from five different donors or more.
 - ii. Cons: Can be cost prohibitive.
2. The Centre for Digestive Diseases in Australia is an option for people who live in Australia.
3. Supervise the patient through a DIY home procedure.

- a. Legal gray area
 - b. Suitable donors can be difficult to find.
 - c. Procedure is not likely to be as effective as it would be in a clinical environment like the Taymount Clinic.
4. Mark Davis, the Bright Medicine Clinic in Portland has a center that does FMT that you may consider contacting.

FMT TREATMENT RESULTS:

- I've seen some miraculous turnarounds, patients with intractable constipation for 10 years that started having regular bowel movements literally overnight. Patients with severe GI issues, fatigue, fibromyalgia, skin issues, improving dramatically.
- I have also seen patients get significantly worse. Some of the patients who had the worst response to FMT were patients with IBD, particularly Crohn's.

HELMINTHIC THERAPY:

- Based on the old friends hypothesis, which suggests that part of what is causing the dramatic rise in autoimmune disease and other immune-related dysfunction is the disappearance of organisms that we co-evolved with for the vast majority of human history, and they include organisms such as *Necator americanus*, or hookworm.
- Studies have suggested that just maybe 25 to 50 hookworms in the human gut does not cause problems and actually have a tuning and regulatory effect on the immune system.
- From a clinical perspective, I currently can't recommend helminthic therapy due to a lack of regulation or standardization or even any resource that I can point you to to legally use as a clinician.