

PART 2

AN INTEGRATIVE APPROACH TO DIAGNOSIS AND TESTING

GUTBLISS GUIDE TO SIBO

SIBO IS A CLINICAL DIAGNOSIS!!

Breath Testing (BT)

- Gases produced in the intestine
- Diffuse into systemic circulation
- Expired through the lungs

Four Main Sources of Intestinal Gas

1. Swallowed air
2. Chemical reactions in the gut
3. Diffusion of gases from the bloodstream
4. Microbial metabolism (carbohydrates)

Healthy Subjects

- 100 ml of intestinal gas (30-200)
- Primary:
 - Hydrogen, carbon dioxide, methane
- Secondary:
 - Oxygen, nitrogen, hydrogen sulfide
- Hydrogen and methane produced exclusively via microbial fermentation in the gut

ACG CONSENSUS GROUP ON BREATH TESTING

Standardization lacking for:

- Indications for testing
- Preparation for testing
- Performance of testing
- Interpretation of testing

Consensus on PREPARATION

- Avoid antibiotics for 4 weeks before testing
- Could not reach consensus on prebiotics/
probiotics
- Pro motility drugs/laxatives should be
stopped 1 week prior if tolerated
- Fermentable foods like complex carbs
should be avoided day before breath testing
- Fasting period prior to testing is 8-12 hours

Consensus on INDICATIONS

- Small bowel culture techniques not satisfactory
- If culture is used, cutoff is >1000 CFU/ml
- BT is preferred modality for diagnosing SIBO
- Evaluate for excessive methane when constipation and slow transit are present
- BT not accurate for assessing transit time
- BT useful for carbohydrate maldigestion
- BT useful for assessing bloating

Consensus on PERFORMANCE

- Lactulose 10 grams
- Glucose 75 grams
- Fructose 25 grams
- Lactose 25 grams

Consensus on INTERPRETATION

- Lots of heterogeneity in tests
- Lots of variability in methodology in different studies
- SIBO may cause a false + test in carbohydrate malabsorption testing
- Increase in hydrogen of >20ppm by 90 minutes = + SIBO test
- Increase in methane of >10 ppm = + SIBO test

Microbiome Sequencing

Dominant Phyla in Humans:

- Firmicutes
- Bacteroidetes
- Actinobacteria
- Proteobacteria

Question #1

1. The Dysbiosis Checklist includes Blastocystis Hominis. Does Dr. Chutkan treat this? If she treats it, does she recommend herbs or antibiotics? Is there any connection between B. Hominis and SIBO? I have heard various responses from functional doctors and others on this. For someone who has had SIBO, what would her general guidance be?

Questions #2-4

2. Connection between SIBO and Type 2 Diabetes/hyperglycemia?
3. Do you recommend a 2 or 3 hour lactulose breath test?
4. Dr Alison Siebecker talks about differences in treatment depending on whether hydrogen or methane are elevated. Do you agree? and if so, what would be the different treatments?

Questions #5-6

5. Where can patients get the glucose/lactulose breath test for SIBO? I'm an RD and not sure if I need to send them to their PCP or GI doc, or if this is something I can order and they do on their own.
6. Are there any particular issues associated with a stool that forms a visible film over the entire surface of the water in the toilet bowl?

Questions #7-10

7. Please explain how the graphic on page 35 relates to the text on that page?
8. The last sentence on page 32 refers to “effective donors.” Please explain.
9. How to test and improve ileocecal valve?
10. Do you think stool tests help with determining type of probiotic treatment?
Example: my Gut Zoomer test indicated I need more Lactobacillus vs. Bifido species.

Questions #11-12

11. Do you use comprehensive stool analysis (e.g., Genova) to assist in diagnosing dysbiosis or SIBO?
12. How do you distinguish between clinical entities like leaky gut, dysbiosis, SIBO, yeast overgrowth, food sensitivities (gluten/lactose intolerance), clinically and with diagnostic testing? Do you have an algorithm for working through this myriad of integrative GI problems?

Questions #13-14

13. Is microbiome testing an important tool in diagnosing SIBO? If so can you give us some pearls on interpretation
14. Is testing essential if there is a known exposure to a food-borne pathogen resulting in diarrhea and IBS?