

A Patient's Guide to Irritable Bowel Syndrome



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IBS: Making a Molehill Out of a Mountain

- 10-15% of the world's population suffers with IBS
- >1 billion people
- 30-40 million people in the US
- 30-50% of visits to a gastroenterologist
- Common cause of work absenteeism and presenteeism
- ~30 Billion Dollars spent annually in the US
- **Less than 1% of NIH funding for Digestive Disorders assigned to IBS and other functional GI disorders**



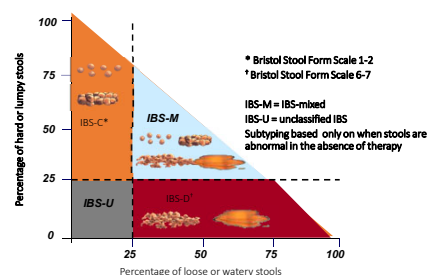
What is IBS? Rome IV Criteria*

- Recurrent abdominal pain 1 day per week associated with two or more of the following:
- Related to defecation
- Onset associated with a change in the frequency of stool
- Onset associated with a change in the form of stool

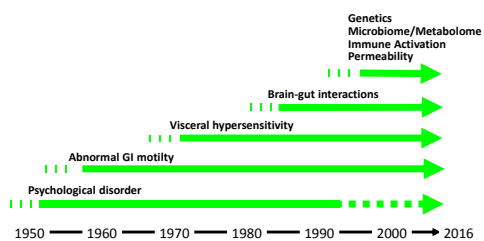
*Criteria fulfilled for the last 3 months with symptom onset at least 6 months prior to diagnosis

Mearin et al. Gastroenterology May 2016

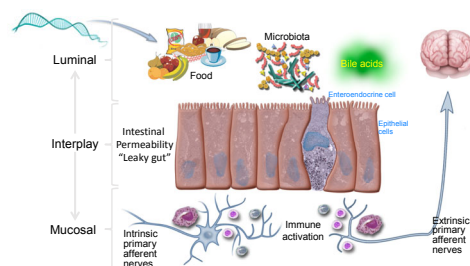
IBS Subtypes Are Based on Stool Consistency

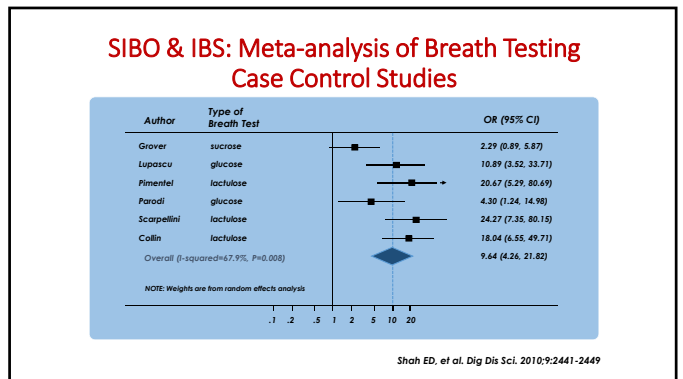
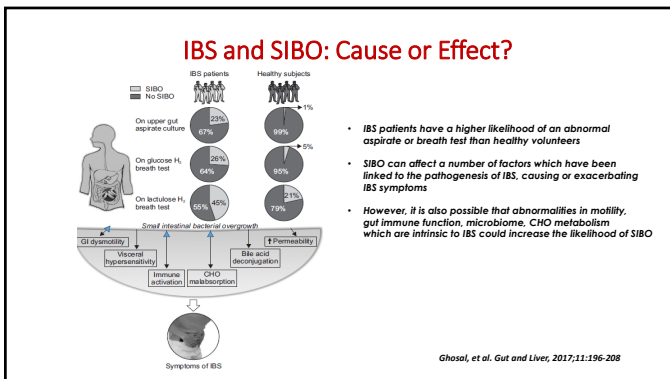
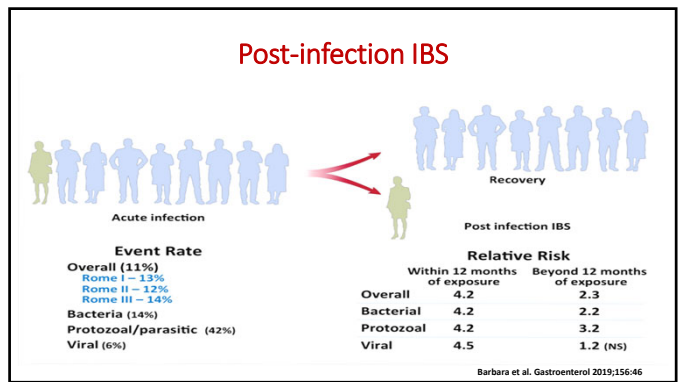
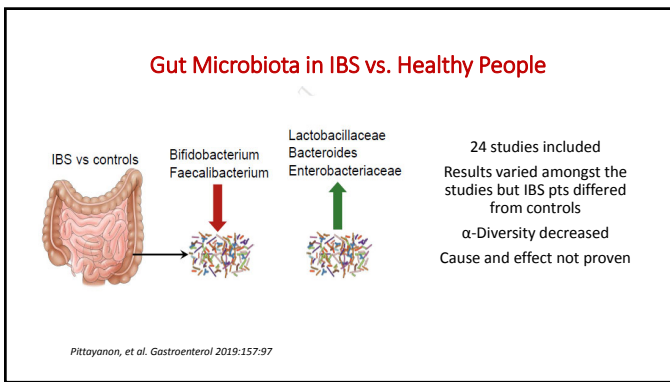
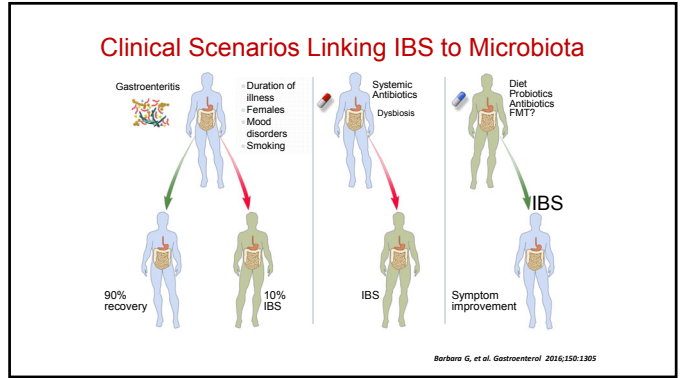
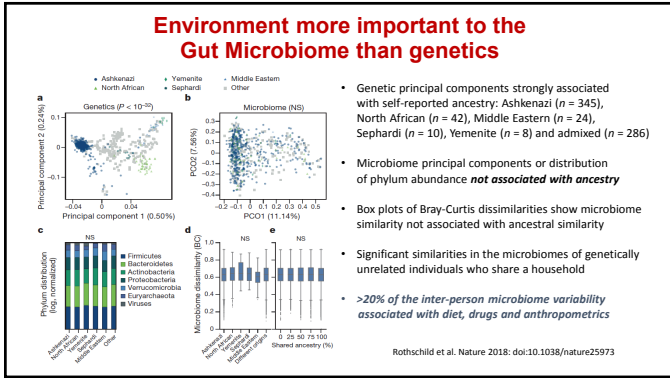


Evolving Pathophysiology of IBS



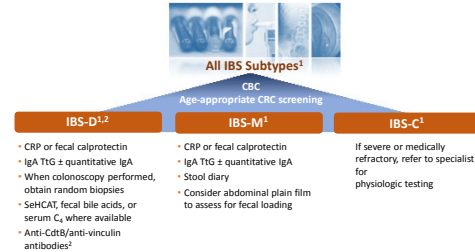
IBS: Bottom-Up Signaling





Diagnosis of IBS

Diagnostic Testing for Patients with Suspected IBS and No Concerning* Features



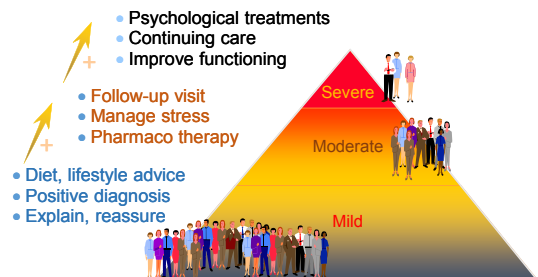
Alarm Features for Organic Disorders

- Unintended weight loss (> 10% in 3 months)
- Blood in the stools not caused (confirmed) by hemorrhoids or anal fissures
- Symptoms that awaken the patient in the night
- Fever
- Family history of CRC (polyposis), IBD or celiac disease

If alarm features are present, investigate and treat appropriately

11:20 PM '31 ROME

Graded Integrative Treatment of IBS



Dietary Interventions for IBS: What is the Evidence?

What are FODMAPs?

- Fermentable oligo-, di-, monosaccharides and polyols
- Fruits with fructose exceeding glucose
 - Apples, pears, watermelon
- Fructan containing vegetables
 - Onions, leeks, asparagus, artichokes
- Wheat based products
 - Bread, pasta, cereal, cake, biscuits
- Sorbitol and lactose containing foods
- Raffinose containing foods
 - Legumes, lentils, cabbage, brussels sprouts

Eswaran & Chey, *GI Clin North Am* 2011;40:141
Shepherd, et al. *Clin Gastro Hepatol* 2008;6:765
Gibson & Shepherd. *J Gastro Hepatol* 2016;25:252

RCTs Evaluating the Low-FODMAP Diet for IBS

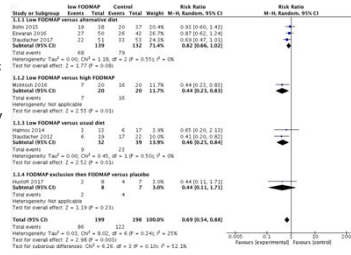
7 RCTs compared a low FODMAP diet with various controls in 397 participants

A low FODMAP diet was associated with reduced overall symptoms compared to controls (RR 0.69; 95% CI 0.54, 0.88, I2 25%)

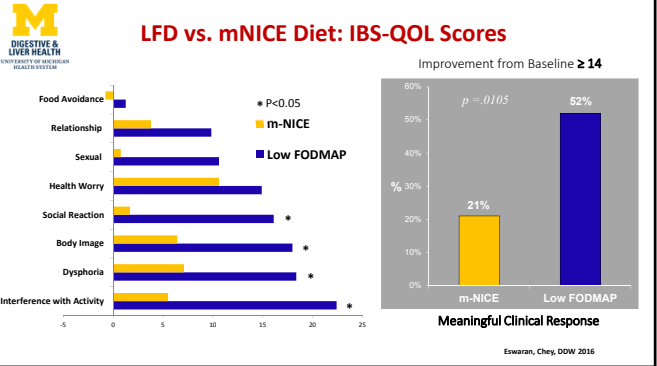
The 3 RCTs that compared low FODMAP diet with rigorous control diets had the least heterogeneity between studies but also the least magnitude of effect

The overall quality of the data was "very low" according to GRADE criteria

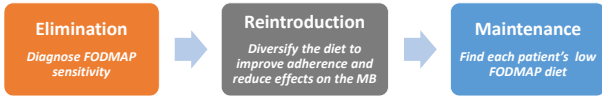
- Most studies were high risk of bias
- Heterogeneity between study designs
- Imprecision in the estimate of effect



Donne JC et al. Presented at DDW 2018, Washington, DC, June 4, 2018, Abstract 1548.



3 Phases of the Low-FODMAP Diet: Elimination is the Beginning NOT the End!!



Additional Information:

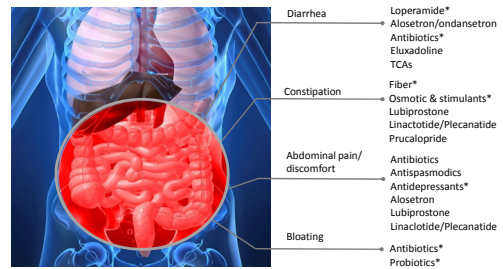
www.mygintnutrition.com

Monash University mobile app

Recent Books: Patsy Catsos, Danielle Capalino, Rachel Meltzer (teens), Kate Scarlata

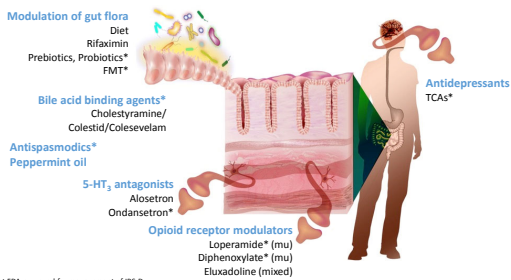
Chey WD, Am J Gastroenterol 2016;111:366

Pharmacologic Therapy Is Directed Toward the Dominant Symptoms



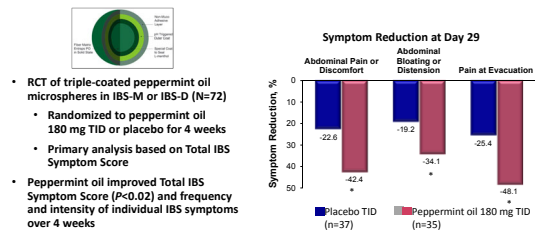
*Not FDA-approved for IBS
 Chey WD, et al. *Gastroenterology* 2012;133:849-858
 AJGT Trial Focus on IBS. *Am J Gastroenterol*. 2016. In press.

Overview of IBS-D Therapies



*Not FDA-approved for management of IBS-D.

Triple-Coated Peppermint Oil for IBS



*P<0.05.
 AEs, adverse events; TISS, Total IBS Symptom Score; URT, upper respiratory tract.

Cash RD, et al. *Dig Dis Sci*. 2016;61:560-571

Utility of Probiotics for IBS:

A Systematic Review & Meta-analysis

- Fifty-three RCTs, 5545 patients
- RR of IBS symptoms persisting with probiotics vs. placebo was 0.81 (95%CI 0.74-0.88)
 - Probiotics had beneficial effects on global IBS, abdominal pain, bloating, & flatulence scores
 - Effects of individual species or combinations marginal to non-existent
 - NNT = 7 (95 % CI 5 – 12)
 - NNH = 35

Ford et al. Am J Gastroenterol Suppl 2018

Probiotics in IBS:

ACG Task Force Recommendations

- “We suggest probiotics, taken as a group, to improve global symptoms, as well as bloating and flatulence in IBS patients”
- Recommendations regarding individual species, preparations, or strains cannot be made at this time because of insufficient and conflicting data
- Recommendation: weak, Quality of evidence: low

Ford et al. Am J Gastroenterol Suppl 2018

Rifaximin for Global Improvement in IBS: A meta-analysis

Measure Outcomes	Response rates (%)		Weight	ARR	NNT
	Rifaximin	Placebo			
Sharara	27.0	9	1.4%	18%	5.6
Pimental	32.5	9	1.6%	23.5%	4.3
Lembo	52.3	44.2	25.2%	8.1%	12.3
Target 1	40.8	31.2	34.9%	9.6	10.4
Target 2	40.6	32.2	36.8%	8.4	11.9
Overall	43.3	34.2	100%	9.1	11.0

Heterogeneity: $\chi^2=5.26$, $df=4$ $I^2=24\%$ $p=0.26$

Menees et al. Am J Gastroenterol 2012;107:28

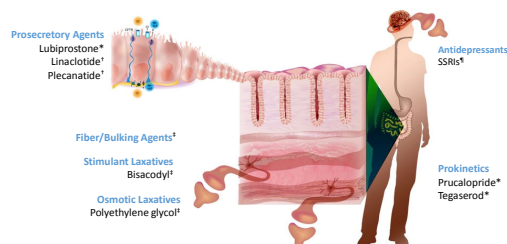
FMT for IBS: Systematic Review & Meta-analysis

- 4 studies involving 254 participants met eligibility
- No significant difference in global improvement of IBS symptoms was observed at 12 weeks in FMT vs placebo
 - RR = 0.93; 95% CI 0.48–1.79
 - Significant heterogeneity ($I^2 = 79\%$)
 - Study quality deemed ‘very low’
 - Colonic or NJ delivery may be more effective than oral capsules
 - Placebo response over 60% with oral capsules
- **Bottom Line: Current evidence from RCTs does not suggest a benefit of FMT for global IBS symptoms**

Xu, et al. Am J Gastroenterol in press

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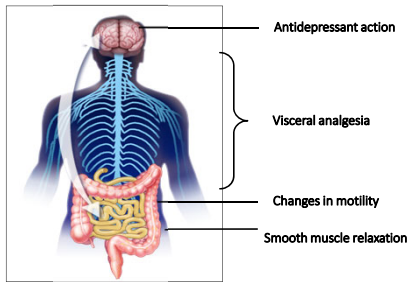
Overview of IBS-C/CIC Therapies



*FDA approved for CIC in adults and IBS-C in women 18 years of age; †FDA approved for CIC and/or IBS-C; ‡Approved for occasional constipation; ††Not FDA approved for CIC or IBS-C.

Neuromodulators for IBS

Neuromodulator Actions in IBS



Adapted from Rome Foundation Functional GI Disorders Specialty Modules.

Psychological Therapies for IBS Subgroup analysis according to type of therapy

	Trials	N	RR 95% CI	NNT 95% CI
Cognitive behavior therapy	7	491	0.60 0.42 – 0.87	3 2 – 7
Relaxation training	5	234	0.82 0.63 – 1.08	
Dynamic psychotherapy	2	273	0.60 0.39 – 0.93	3.5 2 – 25
Hypnotherapy	2	40	0.48 0.26 – 0.87	2 1.5 – 7

Ford AC et al. Gut. 2009;58:367

Summary

- An integrative care model which incorporates diet, behavior, and medications maximizes clinical outcomes
- At present, treatment is chosen based upon an IBS patient's most bothersome symptoms
- The heterogeneous pathogenesis of IBS explains the marginal therapeutic gains of drugs targeting specific mechanistic pathways
- In the future, improvements in testing will allow subgrouping of IBS patients based upon symptoms AND abnormal pathophysiology which will facilitate finding the right treatment for the right patient

Talking to your HCP

Advice from a patient...

Patients Should Know	Doctors Should Know
You and your health are worth fighting for, no matter what. You can demand to be treated with dignity and respect. You have a right to share your personal thoughts and feelings about your care. You have a right to ask questions and receive visual aids to understand your diagnosis and treatment. You have a right to be heard.	Patients need to feel that you care about them as a person and not feel judged. Patients need to feel respected to share personal details that will assist you in their care. Patients need to feel that their doctor will be receptive to their thoughts and feelings
You have the right to engage with your doctor as a partner. You can refuse treatment or seek another opinion if your needs are not being met.	Patients need to understand the diagnosis and treatment plan to participate and feel like they have a say in the process. Patients are not impressed with ego and prestige; they want you to be humane and to care about the impact of the illness on their life. Patients are okay with "I don't know" as long as you continue to work with them, or guide them to someone who will. Patients need to know that you are not going to abandon them.

Ruddy J. Gastroenterol 2018

IBS: The party line...

- IBS is the diagnosis we assign when we can't make another more specific diagnosis - we don't know what causes it.
- It isn't a serious illness as it won't shorten your lifespan or increase your risk of cancer.
- However, it is a chronic condition that is going to last forever.
- There is no cure.
- Unfortunately, you are going to have to learn to live with it.

Hopeless NOT Hopeful!!



Post Infection-IBS: Giving Hope Rather Than Taking It Away

Did your doctor ask about an antecedent infection?

The line on PI-IBS

- It is a specific type of IBS that is caused by an acute gut infection. The infection activates the immune system in the gut which leads to after-effects (hangover analogy) that causes persistent symptoms
- Nearly 2/3 PI-IBS patients will spontaneously improve over 5-6 years
- We will work together to find solutions for your symptoms while your body heals itself

Hopeful NOT Hopeless!!



What About Everyone Else with IBS?

- IBS is a symptom based diagnosis which requires belly pain and altered stool habits – some people have diarrhea, some have constipation and some have both
- We will do several tests to make sure IBS is the right diagnosis
- People often have symptoms which can come and go over time
- IBS can certainly affect your QOL but doesn't shorten your lifespan or cause cancer
- We have a wide range of different treatment options including diet, lifestyle/behavior changes and medications. It can take some time to find the right treatment/s but most of time, we can find a treatment program that can help. We may not be able to completely get rid of all of your symptoms but we can usually find a solution that helps you to take back control of your life.

Parting Words of Wisdom:



"The **good physician** treats the disease.

The **great physician** treats the patient who has the disease."

Sir William Osler



"A good reliable set of bowels is worth more to a man (or woman) than any quantity of brains"

Josh Billings



"There is nothing in life as underrated as a good bowel movement"

William D. Chey

