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Moderator:
Amy G. Ogurick, MD

All attendees will be muted and will remain in "Listen Only Mode"

Type your questions here so that the moderator can see them.
Not all questions will be answered but we will get to as many as possible.

A handout with the slides and room to take notes can be downloaded from your control panel.

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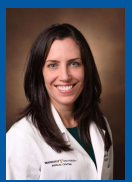
ACG Virtual Grand Rounds

Join us for upcoming Virtual Grand Rounds!








INTERNATIONAL Week 29 – Wednesday July 16, 2025
Understanding both C. diff and Alpha-Gal Syndrome for the Gastroenterologist
Offered in conjunction with the Colombian Association of Gastroenterology
Faculty: Sarah K. McGill, MD, MSc, FACG
Moderator: Alejandro Concha Mejía, Sr., PhD
8pm Eastern

Week 29 – Thursday July 17, 2025
The IBD Pipeline Explosion: S1Ps, IL23, and Subsequent Medications
Faculty: Marla C. Dubinsky, MD
Moderator: Gary R. Lichtenstein,MD, FACG
At Noon and 8pm Eastern

Week 30 – Thursday July 24, 2025
Inpatient Management of the Newly Diagnosed Short Bowel Patient: Consult to Discharge
Faculty: Dawn W. Adams, MD, MS, CNSC
Moderator: Shirley C. Paski, MD
At Noon and 8pm Eastern

Visit **gi.org/ACGVGR** to Register

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Disclosures

Jill K. Deutsch, MD, MA: No relevant financial relationships with ineligible companies.

Amy G. Ogurick, MD: No relevant financial relationships with ineligible companies.

**All of the relevant financial relationships listed for these individuals have been mitigated*

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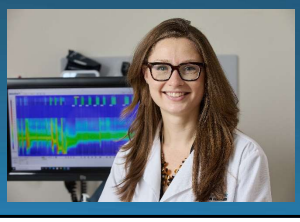
Evaluation and Management of Chronic Abdominal Pain and Suspected IBS

Jill K. Deutsch, MD, MA
Assistant Professor, Section of Digestive Diseases
Director, Yale Functional Gastrointestinal Disorders Program
Medical Director, GI Motility Laboratory
Yale School of Medicine - Yale New Haven Health



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Objectives

- Differentiate organic from functional chronic abdominal pain disorders by reviewing the most common painful disorders of gut brain interaction (DGBIs)
- Gain exposure to the mimickers of painful DGBIs
- Explore the medical and complementary therapies available

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Case #1

- A 28-year-old high school teacher presents for evaluation of left lower abdominal pain and diarrhea. He has had these symptoms for nearly 10 years and was evaluated with EGD and colonoscopy at the time of symptom onset
- He reports 3-4 loose BMs per day associated with urgency
- The patient reports increase in his abdominal pain with meals and partial relief of pain after a BM
  - Pain also worsens when coaching various recreational sports (especially when traveling to long-distance games)
- He denies abdominal bloating or distension

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Alarm Features

That may trigger further evaluation:

- Blood in the stool (anemia)
- Weight loss
- Fever
- Immune suppression
- Onset >50 years of age
- Night-time symptoms (waking the patient from sleep)
- Family history of colon cancer, inflammatory bowel disease, or celiac disease
- Travel history to locations endemic for infectious diarrhea

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Irritable Bowel Syndrome

Rome IV Diagnostic Criteria* for Irritable Bowel Syndrome
Recurrent **abdominal pain**, on average, **at least 1 day per week** in the last 3 months, associated with 2 or more of the following:
1. Related to **defecation**
2. Associated with change in **frequency** of stool
3. Associated with change in **form** (appearance) of stool

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

Stanghellini, Vincenzo et al. Gastroduodenal Disorders. Gastroenterology, Volume 150, Issue 6, 1380 - 1392

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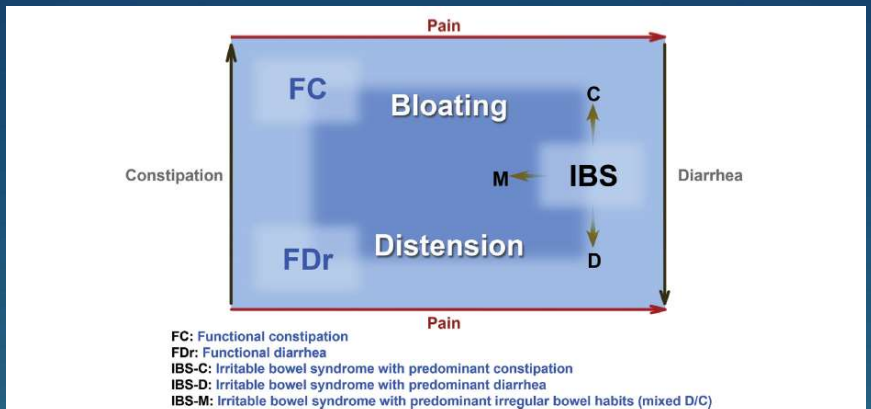
Irritable Bowel Syndrome



FC: Functional constipation
FDr: Functional diarrhea
IBS-C: Irritable bowel syndrome with predominant constipation
IBS-D: Irritable bowel syndrome with predominant diarrhea
IBS-M: Irritable bowel syndrome with predominant irregular bowel habits (mixed D/C)

Figure 1. Conceptual framework to explain FBDs. The FBDs are classified into 5 distinct categories: IBS, FC, FDr, FAB/FAB, and unspecified FBD (U-FBD). Although often thought of as existing as completely separate and discrete disorders, it is important to acknowledge that significant overlap exists between these disorders. These disorders should be thought of as existing on a continuum, rather than as in isolation. This figure illustrates that a patient with IBS (*right*) will have symptoms of abdominal pain, in contrast to a patient with FC or FDr, who does not have abdominal pain. Bloating and distention are common symptoms frequently reported by patients with any FBD.

Stanghellini, Vincenzo et al. Gastroduodenal Disorders. Gastroenterology, Volume 150, Issue 6, 1380 - 1392

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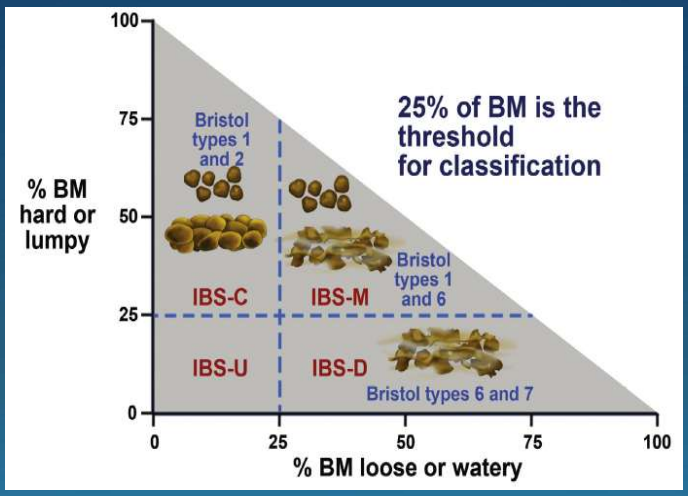
Irritable Bowel Syndrome



Stanghellini, Vincenzo et al. Gastroduodenal Disorders. Gastroenterology, Volume 150, Issue 6, 1380 - 1392

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Case #1

- When his pain worsens, he resorts to a strict low FODMAP diet, resulted in a 10lb weight loss over the 3 months prior to evaluation
- He denies blood in the stools
- He has no family history of GI diseases
- To help manage his symptoms, the patient has been taking a peppermint oil supplement and loperamide ½ cap daily. He has been thinking about starting probiotics
  - Psychiatrist has prescribed benzodiazepines for anxiety

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IBS-C Differentials

Pathology	Diagnostic Testing
Celiac disease**	tTG IgA and total IgA while consuming gluten
Dyssynergic defecation (outlet dysfunction)	Anorectal manometry (ARM)
Colonic inertia	Sitz marker
Hypothyroidism	TSH
Small intestinal bacterial overgrowth (SIBO)	Lactulose or glucose hydrogen breath testing
Medications	

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IBS-D Differentials

Pathology	Diagnostic Testing
Celiac disease**	tTG IgA and total IgA while consuming gluten
Lactose intolerance	Lactose hydrogen breath testing
Inflammatory bowel disease (IBD) and microscopic colitis**	CRP and fecal calprotectin; Colonoscopy
Small intestinal bacterial overgrowth (SIBO)	Lactulose or glucose hydrogen breath testing
Infection**	Stool tests
Post-surgical changes (ie bile acids)	
Hyperthyroidism	TSH
Exocrine pancreatic insufficiency	Pancreatic elastase and fecal fat
Neuroendocrine tumors	Chromogranin A; Imaging
Medications	

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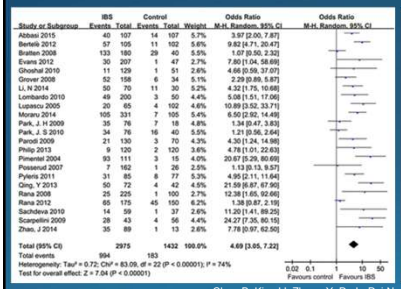
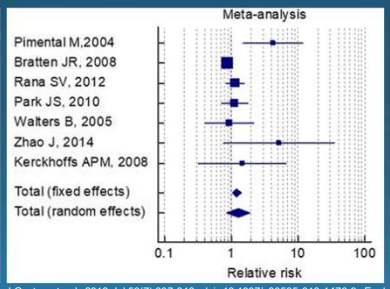
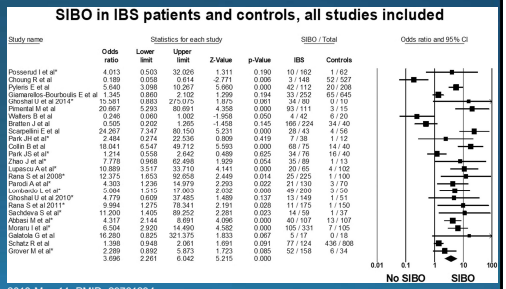
Carbohydrate Malabsorptive Syndromes

SIBO

- A clinical syndrome of GI symptoms caused by the presence of excessive numbers of bacteria within the small intestine
  - Measurable and excessive bacterial burden within the small bowel
  - Presence of specific GI signs and/or symptoms







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Shah A, Talley NJ, Jones M, Kendall BJ, Koloski N, Walker MM, Morrison M, Holtmann GJ. Am J Gastroenterol. 2020 Feb;115(2):190-201. doi: 10.14309/ajg.0000000000000504. PMID: 31913194.

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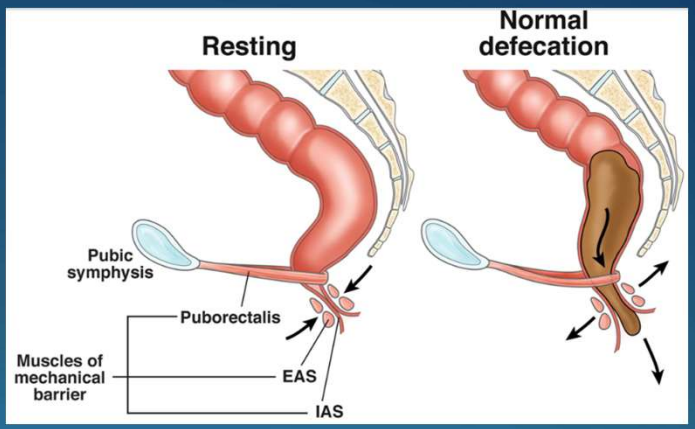
ROME FOUNDATION

Defecatory Disorders

Levator ani syndrome
1. Chronic or recurrent rectal pain or aching
2. Episodes last 30 minutes or longer
3. Tenderness during traction on the puborectalis
4. Exclusion of other causes of rectal pain such as inflammatory bowel disease, intramuscular abscess, anal fissure, thrombosed hemorrhoids, prostatitis, coccygodynia and major structural alterations of the pelvic floor

Proctalgia fugax
1. Recurrent episodes of pain localized to the rectum and unrelated to defecation
2. Episodes last from seconds to minutes with a maximum duration of 30 minutes
3. There is no anorectal pain between episodes
4. Exclusion of other causes of rectal pain such as inflammatory bowel disease, intramuscular abscess, anal fissure, thrombosed hemorrhoids, prostatitis, coccygodynia and major structural alterations of the pelvic floor



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

Rao SS. Advances in diagnostic assessment of fecal incontinence and dyssynergic defecation. Clin Gastroenterol Hepatol. 2010 Nov;8(11):910-9. doi: 10.1016/j.cgh.2010.06.004. Epub 2010 Jun 25. PMID: 20601142; PMCID: PMC2964406.

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Case #1

- Bloodwork and stool tests were obtained:
  - Celiac serologies: negative
  - CRP: normal
  - Fecal calprotectin: normal

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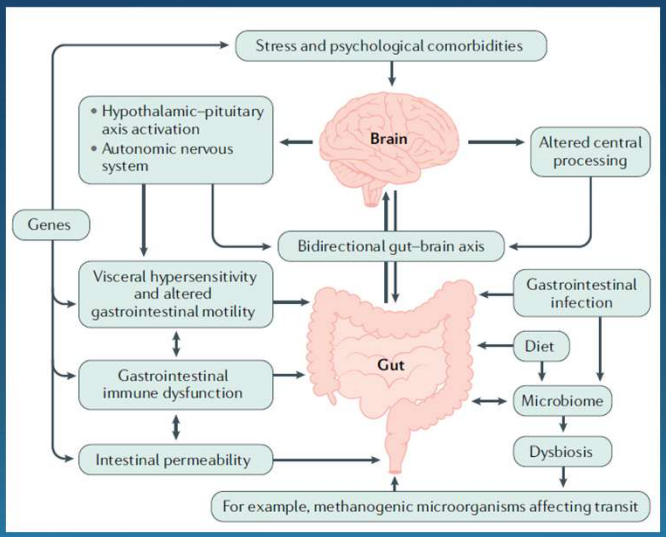
IBS: Pathophysiology



Black, C.J., Ford, A.C. Global burden of irritable bowel syndrome: trends, predictions and risk factors. *Nat Rev Gastroenterol Hepatol* **17,** 473–486 (2020). https://doi.org/10.1038/s41575-020-0286-8

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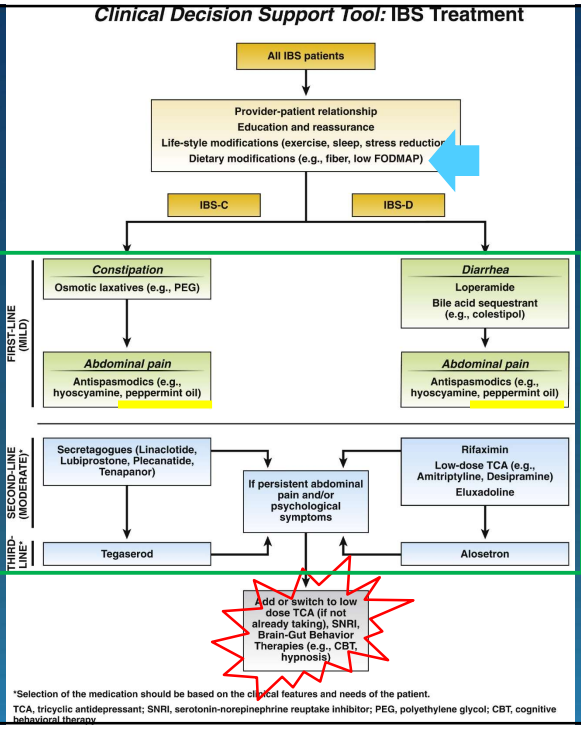

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Case #1

- Eluxadoline was prescribed and patient followed up 6 weeks later reporting once daily BMs (sometimes did not have a BM each day, though he was still taking ½ cap of loperamide)
- Abdominal pain was nearly resolved
- At the time of follow-up 6 months later, he had very rare episodes of abdominal pain, but was able to comfortably travel to games up to 6 hours away from home
- He reported 1-2 BSFS 4 BMs per day

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Case #2

- A 21-year-old woman presents for consultation regarding abdominal pain. She reports “horrible” and “dull” periumbilical pain since third grade alongside nausea with bloating
- Pain is worsened by eating, but has been present constantly except when she has a headache, at which time her pain improves
- She has a BM daily with the use of PEG (that causes a “swirling” sensation in her abdomen) and glycerin suppositories while engaging with pelvic floor physical therapy for a diagnosis of dyssynergic defecation
  - Abdominal pain does not change in relation to using the bathroom

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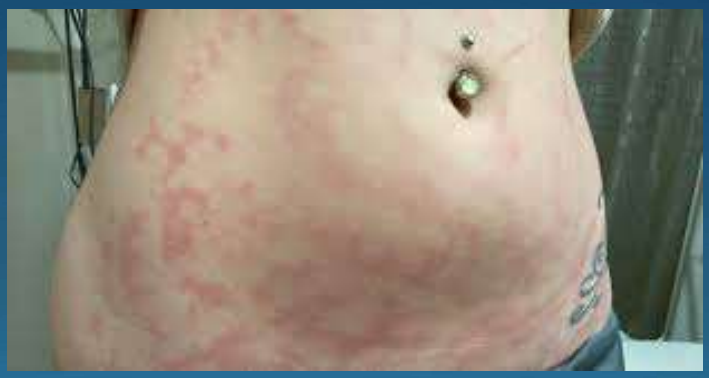
Case #2

Physical Exam:

Height: 5’1”
Weight: 29.1 kg
BMI: 12.13 kg/m^2



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Case #2

- Prior workup included:
  - Nuclear medicine gastric emptying study: Normal
  - Abdominal ultrasound: Normal
  - Upper GI series with small bowel follow through: Normal
  - Antroduodenal manometry: Normal
  - Colon manometry: Normal
  - EGD: Normal
  - Colonoscopy: Normal
  - CT: **Suggestive of celiac artery compression**

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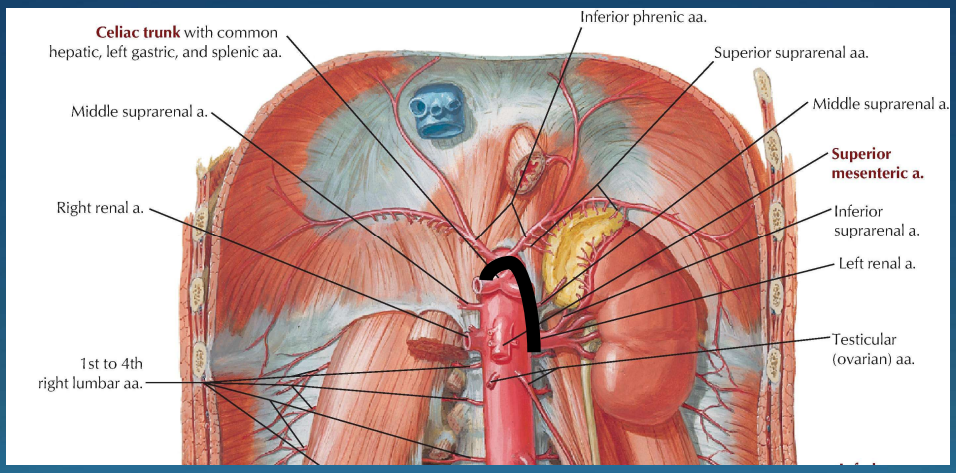
Median Arcuate Ligament Syndrome



Hansen, John T., et al. *Netter's Clinical Anatomy. [netter Basic Science].* Fifth edition. Philadelphia, PA: Elsevier, 2022

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ARFID

DSM V Diagnostic Criteria for Avoidant/Restrictive Food Intake Disorder

A. Eating or feeding disturbance as manifested by persistent failure to meet appropriate nutritional and/or energy needs associated with one or more of the following:

1. Significant weight loss
2. Significant nutritional deficiencies
3. Dependence on enteral feeding or oral nutritional supplements
4. Marked interference with psychosocial functioning

B. The disturbance is not better explained by lack of available food or by an associated culturally sanctioned practice.

C. The eating disturbance does not occur exclusively during the course of anorexia nervosa or bulimia nervosa, and there is no evidence of a disturbance in the way in which one's body weight or shape is experienced.

D. The eating disturbance is not attributable to a concurrent medical condition or not better explained by another mental disorder. When the eating disturbance exceeds that routinely associated with the condition or disorder and warrants additional clinical attention.

American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders* (5th ed., text rev.).

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Case #2

- CT findings led to a celiac ganglion blockade and ultimately release of the median arcuate ligament
- Within 3 months of surgery, the patient's nausea had improved, but her abdominal pain persisted

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Case #2, in summary

- A young woman with constant and chronic abdominal pain, partially worsened by eating meals, but not alleviated by having a bowel movement. She is engaged with pelvic floor physical therapy for a diagnosis of dyssynergic defecation. Multiple examinations have been non-diagnostic for an "organic" etiology of abdominal pain and treatment of suspected MALS failed to provide adequate relief of unremitting pain

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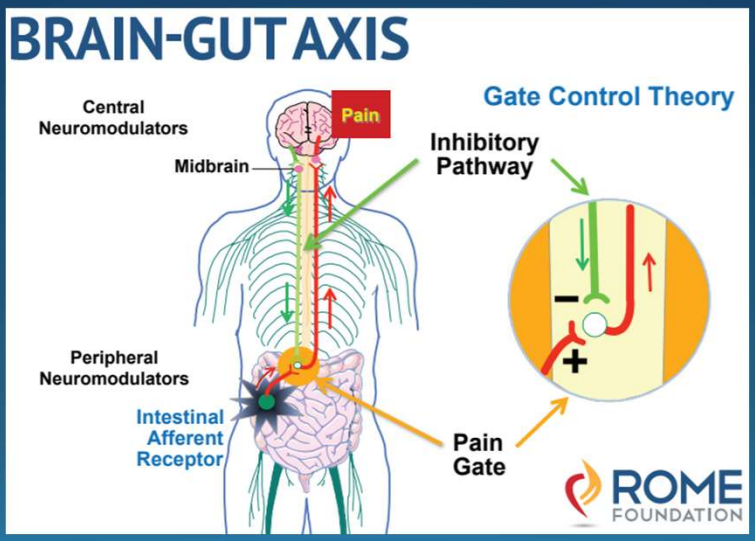
Centrally Mediated Abdominal Pain Syndrome



Reprinted with permission from Dr. DA Drossman.
Fundamentals of Neurogastroenterology: Basic Science. Vanner, Stephen J. et al. Gastroenterology, Volume 150, Issue 6, 1280 - 1291

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Central Neuromodulators

	TCA	SSRI	SNRI
Therapy	Amitriptyline Nortriptyline Imipramine Desipramine	Paroxetine Sertraline Citalopram Escitalopram	Duloxetine Venlafaxine Milnacipran
Indication	First line treatment when **pain** is dominant in DGBIs	When **anxiety**, depression and phobic features are prominent with DGBIs	When **pain** and depression are dominant features with DGBIs
Adverse Events	**Sedation, Constipation**, Dry mouth/eyes, Arrhythmias, Weight gain, and Sexual dysfunction	Insomnia, Agitation, Diarrhea, Headache, Night sweats, Weight loss, Sexual dysfunction	**Nausea**, Agitation, Dizziness, Sleep disturbance, Fatigue, Liver dysfunction

Camilleri M, et al. Pharmacologic, Pharmacokinetic, and Pharmacogenomic Aspects of Functional Gastrointestinal Disorders. Gastroenterology, Volume 150, Issue 6, 1319 – 1331, 2016.

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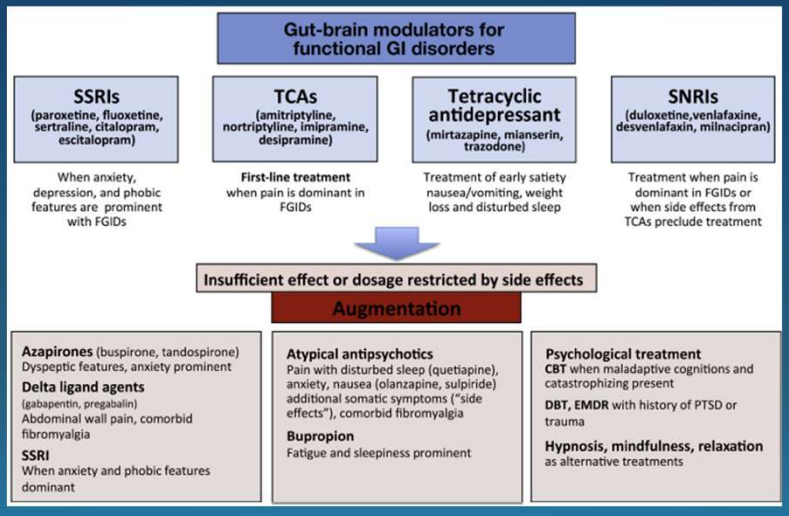
Central Neuromodulators



Drossman DA, Tack J, Ford AC, Szigethy E, Törnblom H, Van Oudenhove L. Neuromodulators for Functional Gastrointestinal Disorders (Disorders of Gut-Brain Interaction): A Rome Foundation Working Team Report. Gastroenterology. 2018 Mar;154(4):1140-1171.e1. doi: 10.1053/j.gastro.2017.11.279. Epub 2017 Dec 22. PMID: 29274869.

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Case #2

- Nortriptyline was prescribed (10mg PO nightly) for 14 days and dose-escalated to 25mg PO nightly. Patient followed up 6 weeks later reporting that she discontinued therapy after two days due to "side effects," but only explained that this medication "made her feel so much worse"

Glissen Brown, Jeremy R. MD, MSc1; Sanayei, Ava MD2; Proctor, Samantha3; Flanagan, Ryan MD, MPH4; Ballou, Sarah PhD3; Bain, Paul A. PhD5; Nee, Judy MD3. Examining the Nocebo Effect in Trials of Neuromodulators for Use in Disorders of Gut-Brain Interaction. The American Journal of Gastroenterology 118(4):p 692-701, April 2023. | DOI: 10.14309/ajg.0000000000002108

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- Implementation
  - Establish the therapeutic relationship
  - Educate to legitimize the disorder
  - Address patient perceptions and expectations about neuromodulators
  - Select a medication and negotiate a treatment plan
  - Continue contact with the patient to assess compliance and side effects

Drossman DA, Tack J, Ford AC, Szigethy E, Törnblom H, Van Oudenhove L. Neuromodulators for Functional Gastrointestinal Disorders (Disorders of Gut-Brain Interaction): A Rome Foundation Working Team Report. Gastroenterology. 2018 Mar;154(4):1140-1171.e1. doi: 10.1053/j.gastro.2017.11.279. Epub 2017 Dec 22. PMID: 29274869.

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Take Home Points

- It is possible, and recommended, to make a positive diagnosis of a disorder of gut-brain interaction like IBS or CAPS with detailed history and physical examination, but with limited extraneous examinations
- The heterogeneous pathophysiology of DGBIs lends to varied, but highly tailored, therapeutic options

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Questions

Jill K. Deutsch, MD, MA

Amy G. Ogurick, MD

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