

Assessing Bloating and Distention

***with an Eye for
Eating Disorder Risk***

Emily Arkin, MS, RD, LD
Jordan Shapiro, MD, MS

Disclosures

Emily Arkin, MS, RD, LD

None

Jordan Shapiro, MD, MS

None

About The Presenters

Emily Arkin, MS, RD, LD



MS Nutrition & Public Health and Dietetic Internship at Teachers College, Columbia University

Worked in IOP and PHP levels of care for eating disorder treatment

Owner of RD Emily & Team, a group practice specializing in eating disorders and weight-inclusive care

Co-author of *Comprehensive Nutrition Therapy for Co-Occurring Gastrointestinal and Eating Disorders*

Jordan Shapiro, MD, MS



MD Medical College of Wisconsin

Residency Internal Medicine and Pediatrics, University of Cincinnati/Cincinnati Children's

Fellowship Gastroenterology & Hepatology, Baylor College of Medicine

Owner of Gentle GI, a trauma-informed GI practice with expertise in GI/eating disorder overlap and disorders of gut-brain interaction

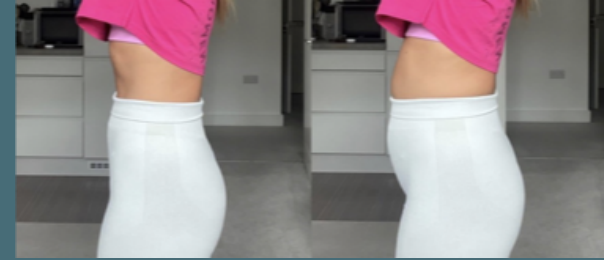
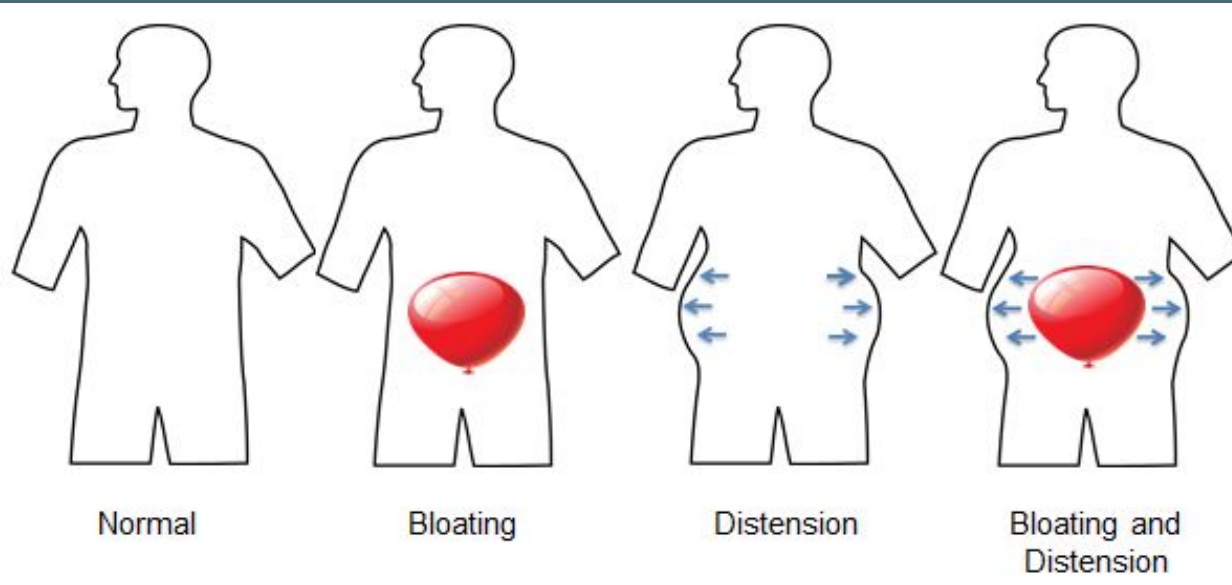
Co-author of *Comprehensive Nutrition Therapy for Co-Occurring Gastrointestinal and Eating Disorders*

Learning Objectives

1. Develop an approach to identify causes of bloating
2. List alarm symptoms that would indicate a more immediate gastroenterology referral
3. Identify two interdisciplinary referrals that can be made for chronic constipation
4. Describe the risk of undertaking elimination diets and alternative therapeutic approaches

Bloating vs Distention

Global prevalence: ~18% (range 11-20%)



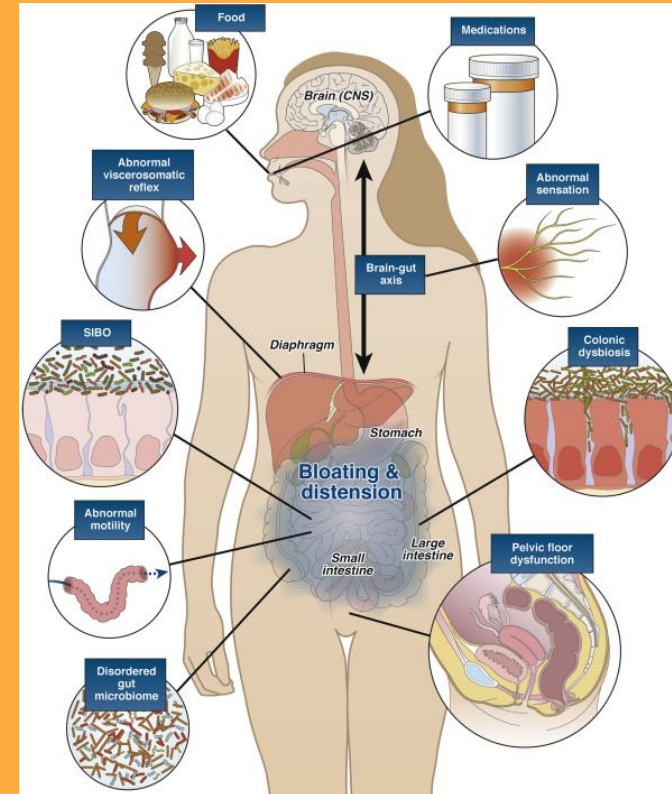
Major Causes of Bloating

Organic/Pathologic Etiologies

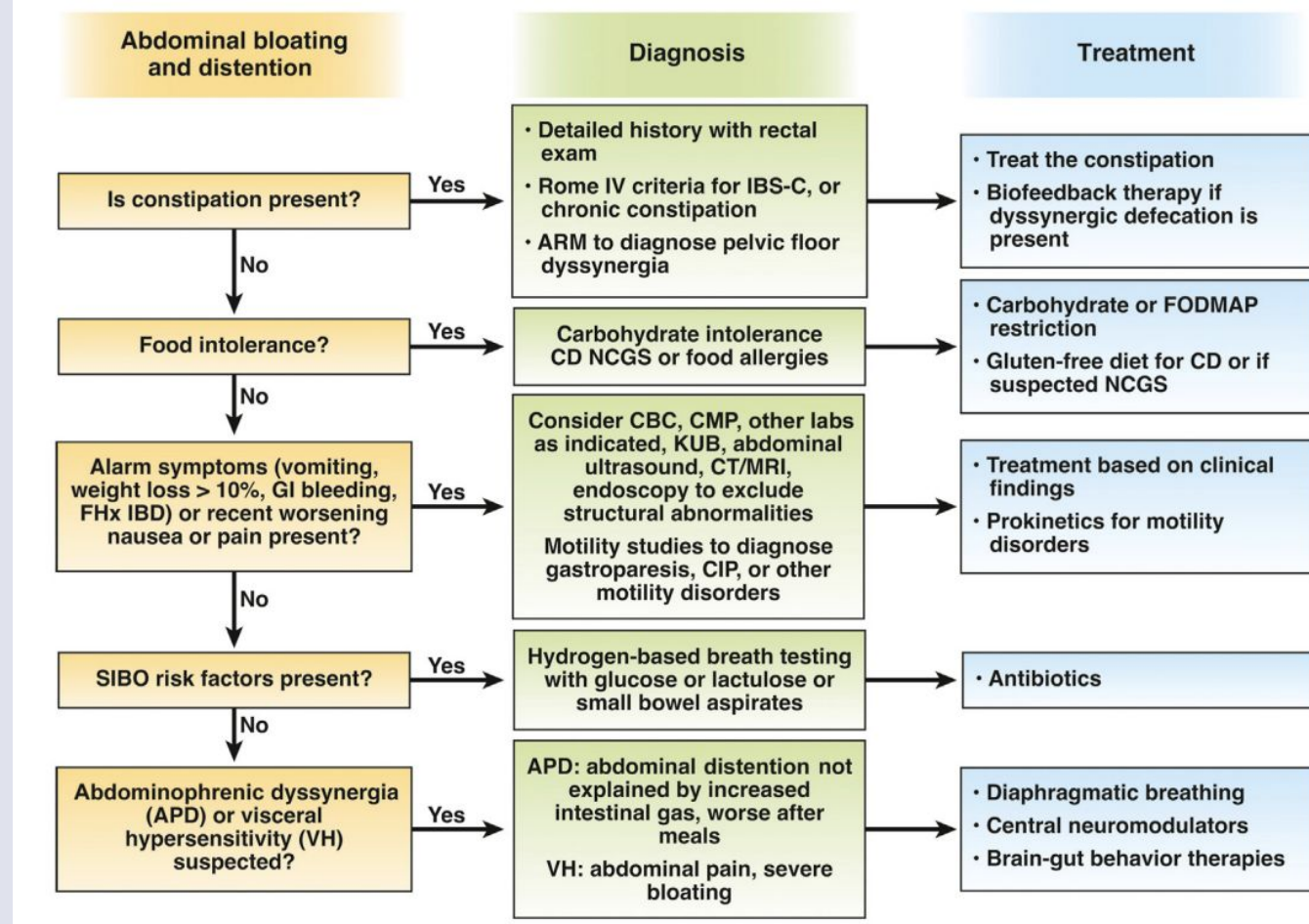
- Small intestinal bacterial overgrowth
- Lactose, fructose and other carbohydrate intolerances
- Celiac disease
- Pancreatic insufficiency
- Prior gastroesophageal surgery (e.g. fundoplication, bariatric surgery)
- Gastric outlet obstruction
- Ascites
- Gastrointestinal or gynecologic malignancy
- Hypothyroidism
- Small intestine diverticulosis
- Chronic intestinal pseudo-obstruction

Disorders of Gut-Brain Interaction

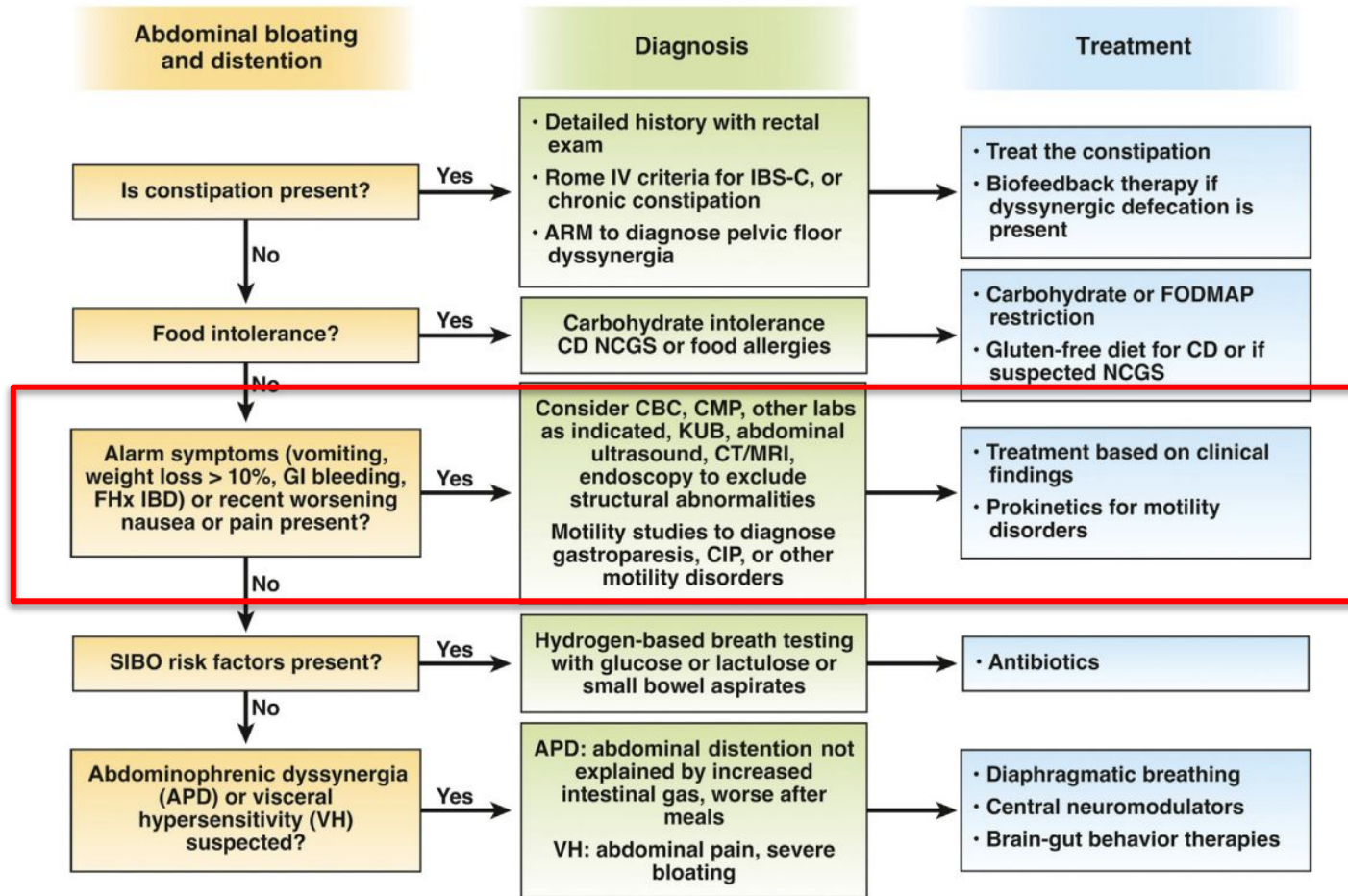
- Irritable bowel syndrome
- Chronic idiopathic constipation
- Pelvic floor dysfunction
- Functional dyspepsia
- Functional bloating



AGA Clinical Practice Update on Evaluation and Management of Belching, Abdominal Bloating, and Distention



#1



Alarm Symptoms

Recurrent nausea/vomiting

Unexplained anemia (specifically iron deficiency anemia)

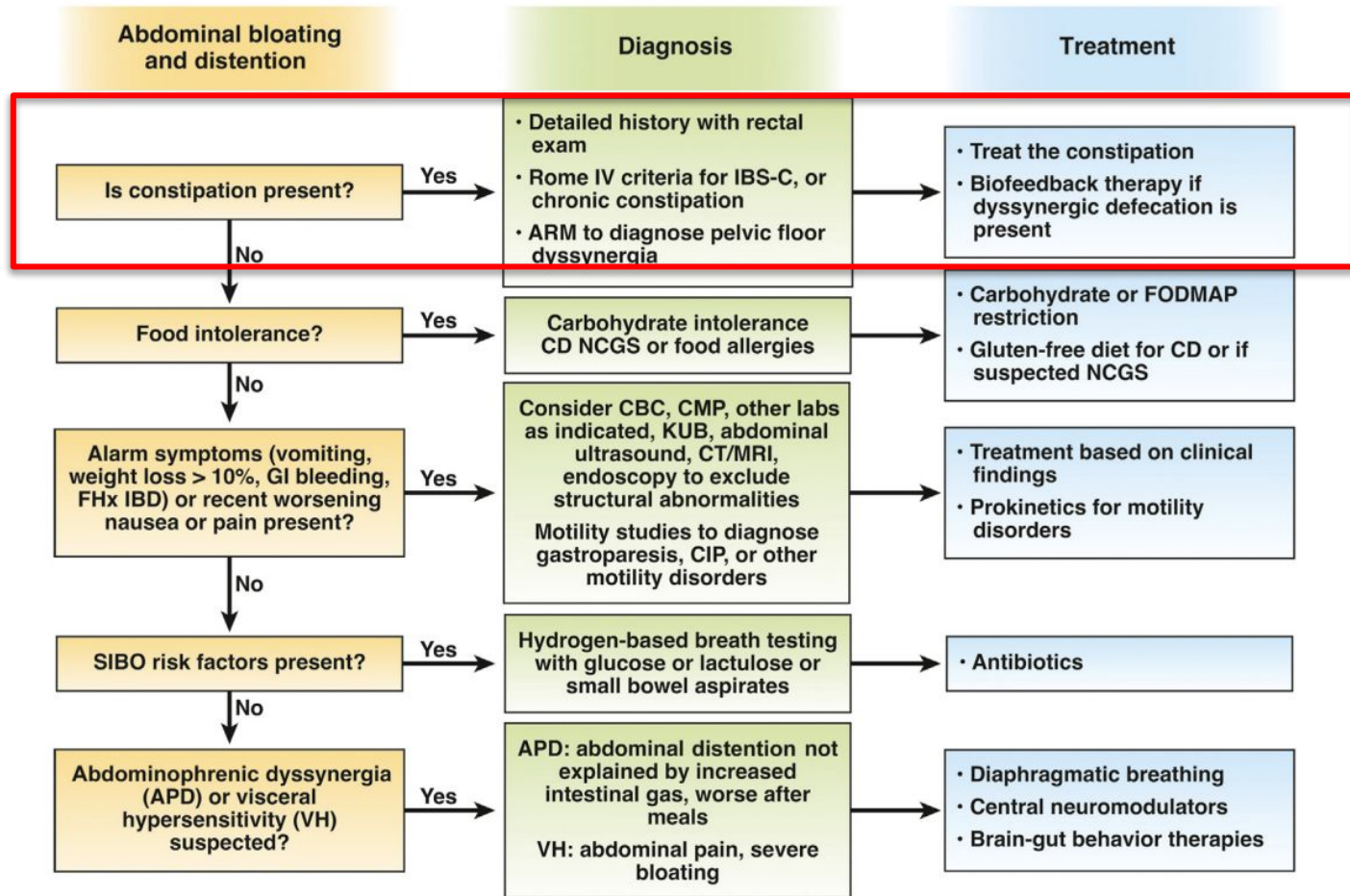
Hematemesis (vomiting blood)

Weight loss ($> 10\%$, unintentional)

Family history of gastroesophageal malignancy, inflammatory bowel disease (Crohn's disease, ulcerative colitis), or celiac disease

Ascites (fluid build up in the abdomen), jaundice

#2



Treating Constipation



IBS-C Rx Medications

→ referral to gastroenterologist

or **Pelvic Floor Therapies**

→ referral to pelvic floor physical therapist

Stimulant Laxatives

→ sennaside, bisacodyl

Osmotic Laxatives

→ polyethylene glycol (PEG), high Mg

3 F's

→ fiber, fluids, "fitness"

Nutritional Considerations in Constipation

Help the client understand that food is NOT driving the problem—motility and/or outlet dysfunction is! Major dietary changes are not helpful.

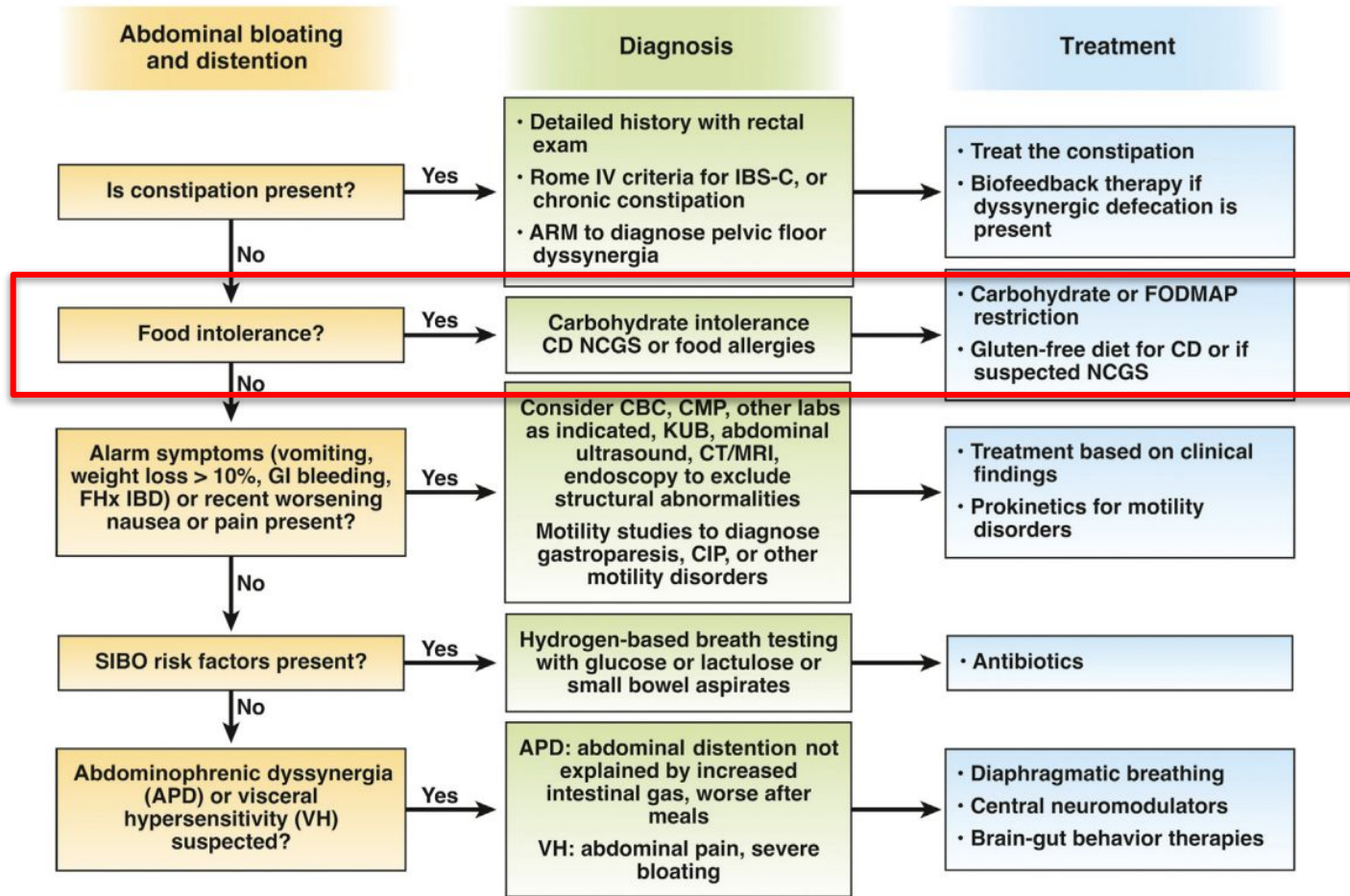
Minor changes to be considered:

- Increases in dietary fiber if woefully inadequate?
- Decreases in dietary fiber if intake is high and pelvic floor dysfunction appears present?
- Avoidance of inulin/chicory root and sugar alcohols until constipation is better managed?

Slavin 2008
Borre et al. 2015
Dukas et al. 2003

Bharucha et al. 2020
Müller-Lissner et al. 2005
Ho et al. 2012

#3



Risks of Elimination Diets (including Low-FODMAP)

Elimination diets are considered contraindicated for people with EDs

- Individuals with “diet-related chronic health conditions” (including IBS) are at increased risk of developing DE/ED compared to healthy controls
- In patients following the low-FODMAP diet for IBS management, high dietary adherence doubled the individual’s ED risk
- GI patients with a self-reported history of participating in an exclusion diet were more than 3 times as likely to meet criteria for ARFID

Quick et al. 2013
Convisher et al. 2018
Mari et al. 2019
Atkins et al. 2023

Sussing Out Food Intolerances

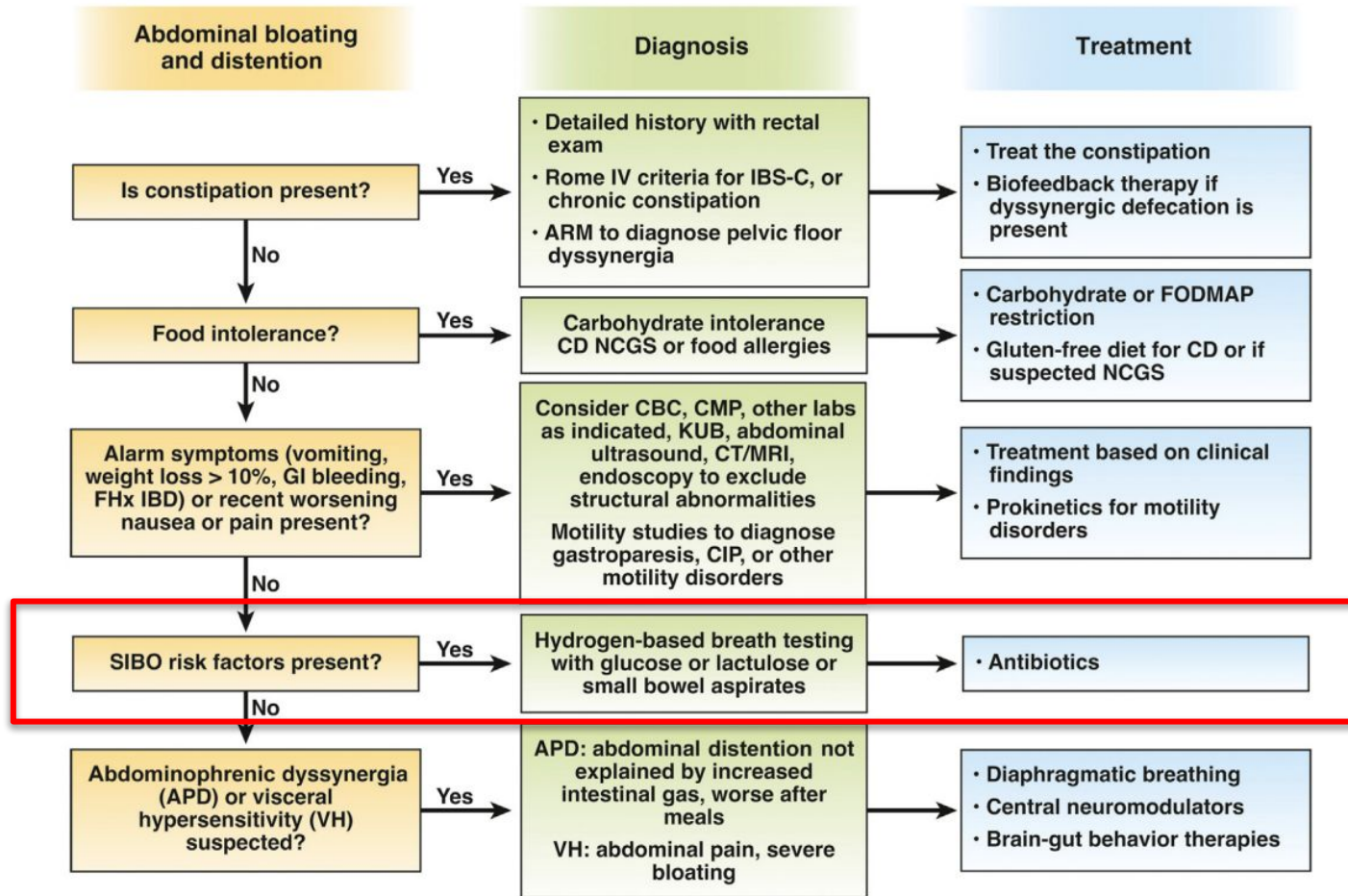
Have a solid hypothesis

Consider alternatives to broad food elimination

- Trial a suitable digestive enzyme to test your theory (e.g. lactase in the case of suspected lactose intolerance, glucose isomerase for fructose intolerance, etc.)
- “Cherry pick” a small selection of foods to take out of the diet on a trial basis IF they fit the overarching hypothesis and appear often (e.g. cauliflower rice/cauliflower pizza crust/cauliflower gnocchi)

Offer appropriate swaps for any foods removed!

#4



Small Intestinal Bacterial Overgrowth (SIBO) and Intestinal Methanogen Overgrowth (IMO)

What is it?

- Excess of bacteria in the small intestinal (SIBO) or excess archaea throughout the intestines (IMO) that ferment foods eaten into gases and substances that cause pain and diarrhea

Causes

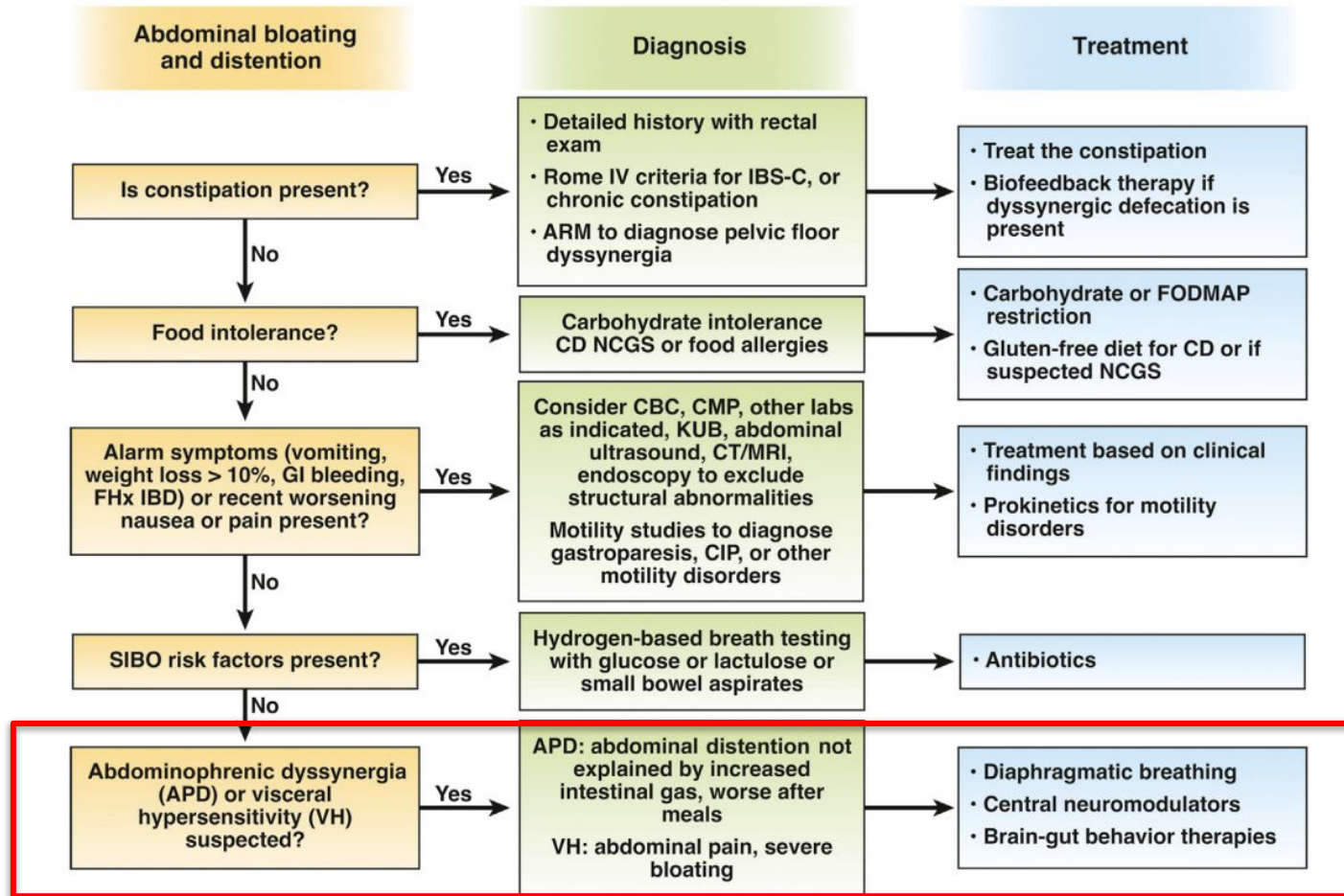
- Classic: post-surgical, motility disorders

Diagnosis

- Gold standard upper endoscopy with jejunal aspirates for culture
- More commonly by breath tests using a carbohydrate substrate (e.g., glucose, lactulose) and measuring gases (e.g., hydrogen, methane, and/or hydrogen sulfide) in the breath

Treatment using antibiotics

- SIBO: rifaximin
- IMO: rifaximin + neomycin
- Hydrogen sulfide: bismuth subsalicylate



#5

Abdomino-phrenic Dyssynergia (APD)

What is APD?

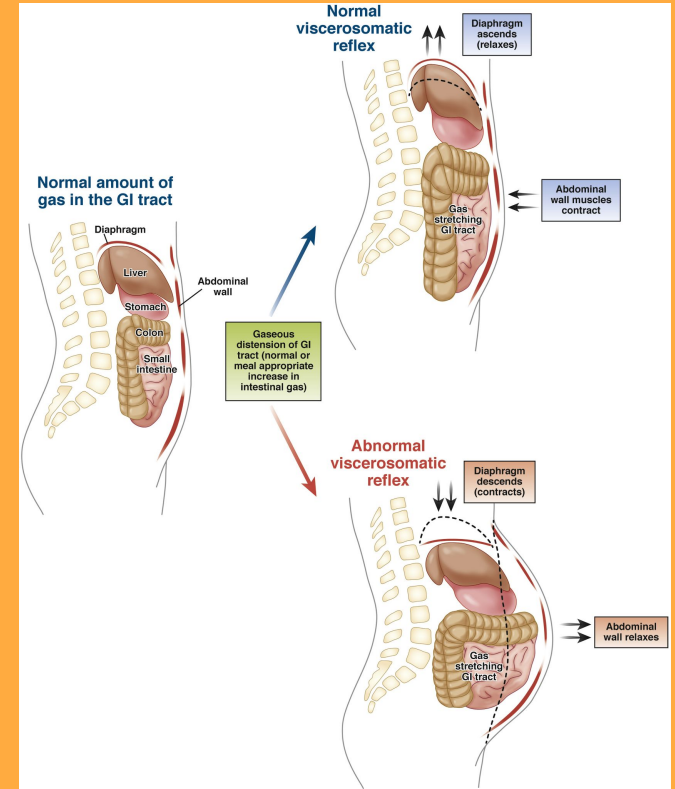
- Many individuals with bloating and distention do not have increased intestinal gas volumes.
- APD is the pathologic contraction and descent of the diaphragm and relaxation and protrusion of the abdominal wall.

Diagnosis

- No standardized testing.

Treatment

- EMG biofeedback, diaphragmatic breathing, treating associated DGBIs



APD and VH Nutrition Strategies

Small, frequent meals to lessen stomach stretch

Make texture modifications to address bulk and slowed gastric emptying from insoluble fiber sources

- Peel and deseed
- Blenderize
- Cook until fork tender
- Chew well

Have fluids separate from meals to avoid crowding out needed nutrition

References

Ballou S, Singh P, Nee J, Rangan V, Iturrino J, Geeganage G, Löwe B, Bangdiwala SI, Palsson OS, Sperber AD, Lembo A, Lehmann M. Prevalence and Associated Factors of Bloating: Results From the Rome Foundation Global Epidemiology Study. *Gastroenterology*. 2023 Sep;165(3):647-655.e4. doi: 10.1053/j.gastro.2023.05.049. Epub 2023 Jun 13. PMID: 37315866; PMCID: PMC10527500.

Lacy BE, Cangemi D, Vazquez-Roque M. Management of Chronic Abdominal Distension and Bloating. *Clin Gastroenterol Hepatol*. 2021 Feb;19(2):219-231.e1. doi: 10.1016/j.cgh.2020.03.056. Epub 2020 Apr 1. PMID: 32246999.

Moshiree B, Drossman D, Shaukat A. AGA Clinical Practice Update on Evaluation and Management of Belching, Abdominal Bloating, and Distention: Expert Review. *Gastroenterology*. 2023;165(3):791-800.e3. doi:10.1053/j.gastro.2023.04.039

Slavin JL. Position of the American Dietetic Association: health implications of dietary fiber [published correction appears in *J Am Diet Assoc*. 2009 Feb;109(2):350]. *J Am Diet Assoc*. 2008;108(10):1716-1731. doi:10.1016/j.jada.2008.08.007

References

- Borre M, Qvist N, Raahave D, et al. Kronisk obstipation og betydning af livsstilsfaktorer [The effect of lifestyle modification on chronic constipation]. *Ugeskr Laeger*. 2015;177(15):V09140498.
- Dukas L, Willett WC, Giovannucci EL. Association between physical activity, fiber intake, and other lifestyle variables and constipation in a study of women. *Am J Gastroenterol*. 2003;98(8):1790-1796. doi:10.1111/j.1572-0241.2003.07591.x
- Bharucha AE, Lacy BE. Mechanisms, Evaluation, and Management of Chronic Constipation. *Gastroenterology*. 2020;158(5):1232-1249.e3. doi:10.1053/j.gastro.2019.12.034
- Ho KS, Tan CY, Mohd Daud MA, Seow-Choen F. Stopping or reducing dietary fiber intake reduces constipation and its associated symptoms. *World J Gastroenterol*. 2012;18(33):4593-4596. doi:10.3748/wjg.v18.i33.4593
- Müller-Lissner SA, Kamm MA, Scarpignato C, Wald A. Myths and misconceptions about chronic constipation. *Am J Gastroenterol*. 2005;100(1):232-242. doi:10.1111/j.1572-0241.2005.40885.x

References

Quick VM, Byrd-Bredbenner C, Neumark-Sztainer D. Chronic illness and disordered eating: a discussion of the literature. Adv Nutr. 2013 May 1;4(3):277-86. <https://pubmed.ncbi.nlm.nih.gov/23674793/>.

Conviser JH, Fisher SD, McColley SA. Are children with chronic illnesses requiring dietary therapy at risk for disordered eating or eating disorders? A systematic review. Int J Eat Disord. 2018 Mar;51(3):187-213. <https://pubmed.ncbi.nlm.nih.gov/29469935/>.

Mari A, Hosadurg D, Martin L, Zarate-Lopez N, Passananti V, Emmanuel A. Adherence with a low-FODMAP diet in irritable bowel syndrome: are eating disorders the missing link? Eur J Gastroenterol Hepatol. 2019 Feb;31(2):178-182. <https://pubmed.ncbi.nlm.nih.gov/30543574/>

Atkins M, Zar-Kessler C, Madva EN, Staller K, Eddy KT, Thomas JJ, Kuo B, Burton Murray H. History of trying exclusion diets and association with avoidant/restrictive food intake disorder in neurogastroenterology patients: A retrospective chart review. Neurogastroenterol Motil. 2023 Mar;35(3):e14513. <https://pubmed.ncbi.nlm.nih.gov/36600490/>.