

Gastroenterology & Hepatology Advanced Practice Providers

2020 Third Annual National Conference

November 19-21, 2020

Red Rock Hotel - Las Vegas, NV







Irritable Bowel Syndrome with Diarrhea

Amber Crosby, APRN-CNP
Norman Gastroenterology Associates
Norman, Oklahoma

Disclosures

All faculty and staff involved in the planning or presentation of continuing education activities provided by the Annenberg Center for Health Sciences at Eisenhower (ACHS) are required to disclose to the audience any real or apparent commercial financial affiliations related to the content of the presentation or enduring material. Full disclosure of all commercial relationships must be made in writing to the audience prior to the activity. Staff at the Annenberg Center for Health Sciences at Eisenhower and Gastroenterology and Hepatology Advanced Practice Providers have no relationships to disclose.

Disclosures

Amber Crosby

Speakers Bureau: AbbVie, Clinical Area- IBD

Case Study 1--Sara, 28 yo female

- Sara presents to the clinic today to discuss recurrent abdominal pain with frequent, loose stools and bloating.
- Intermittent symptoms have been ongoing since adolescence, with periods of improvement and worsening symptoms. Bloating and abdominal distension have become more frequent and bothersome over the last 6 months. At least 3 days a week she is having 3-4 bowel movements per day. She reports some urgency and loose stools. Abdominal pain is associated with bowel movements. There is no visible blood in the stools and she states there are no nocturnal symptoms. She denies weight loss.
- Symptoms are unpredictable. She has not tried any OTC medications for symptoms.
- Aside from GI issues, she considers herself healthy
- Physical exam is negative
- She saw PCP for yearly exam three months ago. At that time, CBC and CMP were drawn, unremarkable. She was told symptoms were likely due to stress and encouraged to use Gas-X.
- Now what.....

Rome IV Criteria

Rome IV Criteria for IBS-D



Abdominal pain ≥1 day per week for the last 3 months associated with ≥2 of the following:



Related to defecation



Change in frequency of stool



Change in form or appearance of stool

Criteria should be fulfilled for the last 3 months with symptom onset ≥ 6 months before diagnosis

^{1.} American College of Gastroenterology Task Force of IBS. Am J Gastroenterol. 2009;104(suppl 1):S1-35.

^{2.} Lacy BE et al. Gastroenterology. 2016;150(6):1393-1407. 3. Cash BD, Chey WD. Aliment Pharmacol Ther 2004;19(12):1235-1245.

Work Up

- What work up do you feel is appropriate now?
 - Additional labs?
 - Imaging?
 - Colonoscopy?
- Primary diagnosis of IBS can be made using a symptom-based strategy if PE is clear and no alarm symptoms are present
 - Research shows symptom-based diagnosis has been shown to have a positive predictive value of 98%
- A study was done to look at the economic burden of IBS-D looking at almost 40,000 patients and it showed average annual cost was around \$13,000, half of which was due to diagnostic testing and radiology

^{1.} American College of Gastroenterology Task Force of IBS. Am J Gastroenterol. 2009;104(suppl 1):S1-35.

^{2.} Lacy BE et al. Gastroenterology. 2016;150(6):1393-1407. 3.Cash BD, Chey WD. Aliment Pharmacol Ther 2004;19(12):1235-1245

Work Up

- Based on symptoms and physical exam, imaging and invasive testing are not warranted
- Additional lab work, however, is recommended. Labs to include:
 - Celiac Panel
 - C-reactive protein and/or fecal calprotectin
 - Thyroid function
- Labs done, all unremarkable
- Sara wants medicine to fix her issues

Pharmacologic Treatment Options

Modulation of gut flora

- Rifaximin
- Probiotics*

Antispasmodics*

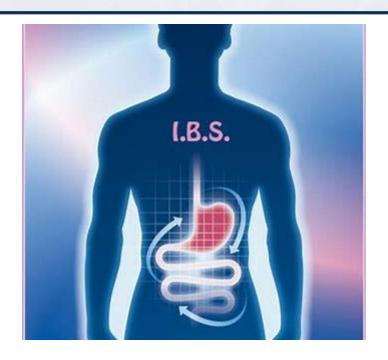
Peppermint oil*

Opioid receptor modulators

- Loperamide* (mu)
- Diphenoxylate* (mu)
- Eluxadoline (mixed)

Antidepressants

TCAs*



Bile acid binding agents*

- Cholestyramine/
- Colestid/Colesevelam

5-HT3 antagonists

- Alosetron
- Ondansetron*

Fiber supplements*

Bismuth subsalicylate*

^{*}Not FDA-approved for management of IBS-D.

Pharmacologic Treatment Options by Symptom

Diarrhea

- Loperamide (Recommendation: strong; Quality of evidence: very low)
- Rifaximin (Recommendation: weak; Quality of evidence: moderate)
- TCAs (Recommendation: strong; Quality of evidence: high)
- Eluxadoline (Recommendation: weak; Quality of evidence: moderate)
- Alosetron (Recommendation: weak; Quality of evidence: low)

Bloating

- Rifaximin (Recommendation: weak; Quality of evidence: moderate)
- Eluxadoline (Recommendation: weak; Quality of evidence: moderate)

Pharmacologic Treatment Options by Symptom

Pain

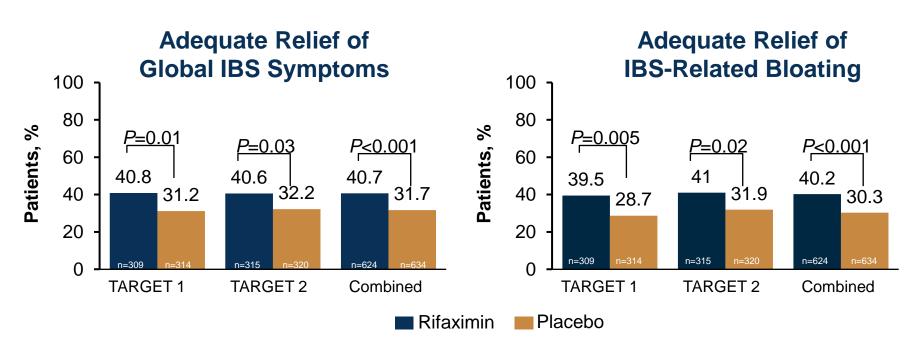
- Antispasmodics (Recommendation: weak; Quality of evidence: very low)
- TCAs (Recommendation: strong; Quality of evidence: high)
- Alosetron (Recommendation: weak; Quality of evidence: low)
- Eluxadoline (Recommendation: weak; Quality of evidence: moderate)

Patient Follow Up

- Started rifaxamin 550mg PO TID for 14 days
- Followed up in four weeks and she was doing well, symptoms had resolved. Encourage well-rounded diet and exercise.
- She did well but after 6 months she had some recurrent bloating.
 She was retreated with14 day course of rifaxamin with positive response

Rifaximin, A Nonabsorbable Antibiotic, Improves Global IBS Symptoms and Bloating in IBS-D

Outcomes at 4 Weeks



Case Study 2—Rachel, 35 yo female

- Rachel presents to the clinic complaining of increased abdominal pain, bloating, and loose stools up to 4 times daily. No visible blood in the stools, no nocturnal symptoms.
- She was diagnosed with IBS five years ago by gastroenterologist after extensive work up including colonoscopy, EGD, CT scan, lab work, all unremarkable.
- No family history of any GI pathology
- She takes dicyclomine for cramping intermittently, with some relief. She has recently tried a gluten-free diet but was disappointed with the results.
- She would like to manage her symptoms without medication, if at all possible

Rome IV Criteria

Rome IV Criteria for IBS-D



Abdominal pain ≥1 day per week for the last 3 months associated with ≥2 of the following:



Related to defecation



Change in frequency of stool



Change in form or appearance of stool

Criteria should be fulfilled for the last 3 months with symptom onset ≥ 6 months before diagnosis

^{1.} American College of Gastroenterology Task Force of IBS. Am J Gastroenterol. 2009;104(suppl 1):S1-35.

^{2.} Lacy BE et al. Gastroenterology. 2016;150(6):1393-1407. 3.Cash BD, Chey WD. Aliment Pharmacol Ther 2004;19(12):1235-1245.

Alarm Symptoms?

- Is the physical exam normal?
- Is the patient 45-50?
- Does the patient have a family history of colon cancer, IBD, celiac?
- Recent antibiotic use?
- Travel to region with high occurrence of infection or parasite?
- Nocturnal symptoms?
- Has there been any unintentional weight loss?
- Is there fever?
- Is there anemia?

Nonpharmalogic Approach to IBS-D

- Low FODMAP diet (Recommendation: weak; Quality of evidence: very low)
- Exercise (Recommendation: weak; Quality of Evidence: very low)
- Psychological therapies [provider-directed cognitive behavioral therapy, relaxation therapy, hypnotherapy, and multicomponent psychological therapy]
 (Recommendation: weak; Quality of evidence: very low)
- Fiber—psyllium not wheat bran (Recommendation: strong; Quality of evidence: moderate)
- Peppermint Oil (Recommendation: weak; Quality of evidence: low)

^{1.} ACG Monograph on Management of Irritable Bowel Syndrome. Am J Gastroenterol. 2018;118. https://doi.org/10.1038/s41395-018-0084-x.

^{2.} Pietrzak A et al. Prz Gastroenterol. 2018;13:259–288.

Nonpharmalogic Approach to IBS-D

Probiotics (Recommendation: weak; Quality of evidence: low)

Monostrains

- Bifidobacterium bifidum MIMBb75
- Bifidobacterium infantis 35624
- Bifidobacterium lactis
- Escherichia coli DSM17252
- Lactobacillus acidophilus SDC 2012, 2013
- Lactobacillus plantarum 299v

Strains tested in selected populations, or an effect covering only a part of symptoms

- Bacillus coagulans GBI-30, 6086
- Bifidobacterium animalis
- Saccharomyces boulardii CNCM I-745

Blends

- Combined preparation: Lactobacillus rhamnosus NCIMB 30174, L. plantarum NCIMB 30173, L. acidophilus NCIMB and Enterococcus faecium NCIMB 30176
- Combined preparation: Lactobacillus animalis subsp. lactis BB-12, L. acidophilus LA-5, L. delbrueckii subsp. bulgaricus LBY-27 and Streptococcus thermophilus STY-31; Bifidobacterium animalis DN-173 010 in fermented milk (together with Streptococcus thermophilus and Lactobacillus bulgaricus)
- Combined preparation: Lactobacillus rhamnosus GG, L. rhamnosus LC705, Propionibacterium freudenreichii subsp. shermanii JS DSM 7067 and Bifidobacterium animalis subsp. lactis Bb12 DSM 15954
- Combined preparation Pediococcus acidilactici CECT 7483, Lactobacillus plantarum CECT 7484 and L. plantarum CECT 7485
- Combined preparation: Streptococcus thermophilus DSM24731, Bifidobacterium longum DSM24736, Bifidobacterium breve DSM24732, Bifidobacterium infantis DSM24737, Lactobacillus acidophilus DSM24735, Lactobacillus plantarum DSM24730, Lactobacillus paracasei DSM24733 and Lactobacillus delbrueckii ssp. bulgaricus DSM24734

Patient Follow up

- Rachel agreed to try Low-FODMAP diet and follow up in four weeks
- At follow up she states she felt about the same, however admitted she was unable to follow diet closely
- She was still apprehensive to pharmacologic therapy. Agreed to try cutting out gluten, dairy, garlic and onion and incorporate exercise regimen. She was also going to try to incorporate more fiber and consider adding psyllium.
- Followed up in another four weeks and she felt symptoms were better controlled

Thank you!

Questions?