

## **EVIDENCE-BASED APPROACHES: IMC Case on IBS and Fibromyalgia**

A 38 year old white female presents with a 5 month history of intermittent diarrhea and abdominal pain. She states the symptoms started shortly after she had to file bankruptcy secondary to "low cash flow". The patient states on most days of the month she will have dull, crampy aches in the lower abdomen which seem to improve somewhat when she has a bowel movement. She also feels bloated at times. She states on severe days she will have 5 or 6 loose, mushy stools. She believes the abdominal pain and change in bowel habits started concurrently. She denies any blood in the stools, although about 5 years ago she did have some blood on the toilet paper when wiping and was told by an urgent care center she had hemorrhoids. She denies any weight loss, decreased appetite, or known family history of abdominal disorders. She has no nausea or vomiting. Further review of symptoms is remarkable only for poor sleep and diffuse musculoskeletal aches (pt reports previously being told she has fibromyalgia). Denies fever, chills, headache, dizziness, chest pain, palpitations, cough, wheeze, dyspnea, dysuria, hematuria, or vaginal discharge. She denies joint swelling and stiffness, rash, lower leg pain, and edema. Menstrual periods are regular in frequency and duration; symptoms do not change with respect to menses. Pelvic exam including PAP and GC/Chlamydia screen done 3 months ago at Planned Parenthood were within normal limits per patient. She has two healthy children (both via vaginal birth).

**Past Medical Hx:** Fibromyalgia, Hemorrhoids

**Past Surgical Hx:** tubal ligation (at age 31)

**Allergies:** NKDA

**Medications:** Acetaminophen 650 mg Q 6 hours prn "aches and pains"

**Social Hx:** Smokes ½ PPD for 15 years; rare alcohol around holidays; denies illicit drug use; works as cook at Wendy's part time (admits to financial stress)

**Family Hx:** Adopted, unknown at this time

**ROS:** As Above

**Vitals:** Temp 97.1 HR 65 BP 126/84 Resp 14 Pulse Ox 98%RA Ht 66 in Wt 170# BMI 27.4 kg/m<sup>2</sup>

**Gen:** A&OX3, NAD, Pleasant, Obese

**HEENT:** PERRL, EOMI, oral mucosa moist, no oral lesions noted; turbinates pink and moist

**Neck:** Supple, no JVD, no lymphadenopathy, no thyromegaly

**CV:** RRR, no murmur, gallop, or rub; peripheral pulses palpated; no edema, no clubbing

**Lungs:** CTA bilaterally; no wheeze, rhonchi, rale

**Abdomen:** Soft,+ BS, non-distended, diffuse lower abdomen tenderness, but no rebound, no involuntary guarding, no rigidity; no mass, hernia, or bruit

**Rectal:** No perianal lesions, no masses, soft brown stool, hemoccult negative

**Skin:** No lesions or rashes

**Neuro:** Grossly intact

Please Use the Annals of Internal Medicine "In the Clinic" Review Article to answer the following questions (you will need to sign in with your ACP password (username/password for MKSAP))

(Link: <http://annals.org/aim/article/2629565/irritable-bowel-syndrome>)

1. What is the definition of IBS as defined in 2016 by Rome IV (ITC83)?
2. What group is IBS more common in: men or women (ITC 82)?
3. What is the prevalence rate reported in the United States/Europe (ITC 82)?
4. What are the differences between Rome III and Rome IV criteria (ITC 83)?
5. Does the patient meet the Rome IV criteria for IBS (box ITC 85)? Why?
6. What are the sensitivity and specificity of the Rome IV criteria?
7. What are the subgroups (defecation patterns) characteristic of IBS (ITC 82)? Which does our patient have?

You tell the patient that she may have a disorder of gut-brain interaction, however, you need to do other tests in order to ensure that your diagnosis is accurate.

8. The absence of which alarm features should reassure the clinician that IBS is the correct diagnosis (ITC 82 and ITC 83)?
9. Review the list of differential diagnoses of IBS and their clinical characteristics and potential workup on page ITC86. Come up with 3 standard question streams (i.e. set of questions you will ask every patient who you are suspicious has IBS) to ask patients with constipation-predominant, diarrhea-predominant, or pain-predominant symptoms to differentiate organic diseases from IBS.
10. What lab test(s) should be ordered for any patient suspected to have IBS? What lab test(s) would you order on our patient (ITC84)?
11. What would lead you to send an IBS patient to GI for colonoscopy evaluation (ITC84)?
12. When and what imaging is (and is not) indicated in patients suspected to have IBS (IT84)?
13. When should a patient undergo a colonoscopy? When should random biopsies be obtained during a colonoscopy? What diagnosis are you thinking about? (ITC87)

Further history does not elucidate any concerns for other causes of her diarrhea and her laboratory studies are normal. You inform the patient that she has IBS-D.

14. The patient asks for your advice on whether she should alter her diet or increase fiber in her diet. Please give her an evidence based answer. (IT87-88)

You reassure the patient that her symptoms are not life threatening and that different stressors may trigger her symptoms. You explain that it is important to develop some self-management strategies and coping mechanisms and tell her that another member of the health care team

(BHC) will be in to talk with her more about this when you have concluded your part of the visit. The patient now asks for treatment options.

15. Please briefly review the effectiveness of the following agents in treating IBS (Table IT90, text ITC89-93).
  - a. Exercise
  - b. CBT (include Number Needed to Treat)
  - c. Antispasmodics (name 3 available in US)
  - d. Antidiarrheals
  - e. Antibiotics (i.e. Rifaximin; include NNT and dosing)
  - f. Probiotics (include NNT)
  - g. Osmotic laxatives (name indications and contraindications for specific ones)
  - h. Alosetron (note, you will not prescribe this medicine!)
  - i. Lubiprostone
  - j. Antidepressants
  - k. Herbal therapies (name specific ones with evidence)

You start the patient on loperamide prn for frequent and loose stools and psyllium supplement daily. The tissue transglutaminase antibody comes back negative. The patient calls you in two weeks to let you know that the loperamide has helped increase the form to her stools, but she is still having bloating and abdominal cramping which are relieved somewhat with stooling. The patient states she is very “strapped for cash” and can only afford drugs on the \$4 program. Michelle Cudnik, PharmD (IMC clinical pharmacist) shows you her \$4 program list, and you decide to prescribe nortriptyline 10 mg QHS. The patient calls you in 3 weeks and states “You are the best doctor I have ever had”. Apparently her abdominal symptoms are better, she feels like she is sleeping better, and the “fibro has calmed a bit”. She is having only a mildly dry mouth as far as side effects, so you increase her nortriptyline to 25 mg HS.

Utilize the following link to answer the following questions:

<https://jamanetwork.com/journals/jama/fullarticle/1860480>

16. What is the prevalence of fibromyalgia? (pg. 1548)
17. What are other co-morbidities that patients with fibromyalgia tend to have? (pg. 1548)
18. What percentage of the risk of developing fibromyalgia is genetic? What percentage is environmental? (pg. 1548)
19. What are some modifiable risk factors for fibromyalgia? (pg. 1549)
20. When should a centralized pain syndrome be considered (Box 1, pg. 1551)
21. Review the Patient Self-Report survey on page 1550. What symptoms are associated with fibromyalgia? What is the score cut-off for diagnosing fibromyalgia?
22. What lab tests should be done to exclude other causes of chronic pain? (pg. 1549)

23. What are three essential nonpharmacologic therapies on which to educate patients on?  
(pg. 1551)

24. What is a stepwise approach to treating a patient with fibromyalgia? (Box 2, pg. 1553)

At your recommendation, the patient starts an exercise program, sees a counselor at Portage Path, continues the nortriptyline, and is feeling much better. Her energy is greatly improved. She thanks you profusely for your compassionate care.

Case by Rex Wilford, DO; Last updated 1-15-2019 by E. George, MD