EIC ACG Questions From the Audience

1. How did Dr. Rao treat the patient featured in the video?

   Satish Rao, MD: *The patient had slow-transit constipation and had previously failed PEG [polyethylene glycol] therapy. The patient had no evidence of dyssynergic defecation. Hence, it was recommended that the patient take lubiprostone 24 µg once daily with a* meal.

2. Can you tell me how to differentiate IBS-C [irritable bowel syndrome with constipation] from chronic constipation? I don't find it practical to follow the Rome criteria.

   Satish Rao, MD: *There is a significant overlap between these 2 conditions, and I agree that a Rome criterion is not practical. In clinical practice, it is worth delving into the patient's complaints and symptom profiles in greater detail. If the patient has predominant pain or discomfort with bloating, it is more likely that he/she has IBS-C rather than chronic constipation. However, many patients with chronic constipation will also have similar complaints. Many patients with IBS-C will have pain that is often disproportionate to their chronic constipation issues. Finally, patients will continue to experience significant symptoms of discomfort and pain even after relief of chronic constipation. These are clues to the possibility of the existence of IBS-C. If a patient reports significant anorectal discomfort or has to use digital maneuvers to defecate, it is more likely that he/she has chronic constipation. Anorectal manometry can help differentiate the 2 disorders by identifying the presence of rectal hyposensitivity, which is more of a feature with IBS-C than with chronic constipation.*

   Julia Pallentino FNP*: When evaluating a patient for* chronic constipation *or IBS-C, I do not strictly follow Rome criteria. First, I determine whether the complaint is chronic. Complaints that have been ongoing for more than 3 months fit that category. Then I ask about the symptoms that the individual is experiencing. If the symptoms suggest constipation, I then determine whether there is a complaint of pain. Pain that resolves with a bowel movement is critical to the diagnosis of IBS-C and is the factor that distinguishes it from chronic constipation.*

3. What percentage of patients presenting with constipation have dyssynergia?

   Adil Bharucha, MD*: The prevalence of dyssynergia among constipated people in the community is unknown. In tertiary centers, the prevalence is up to 50%.*

4. Do you "clean out" patients prior to transit study?

   Adil Bharucha, MD: *No*

5. Given the new dose of lubiprostone 8 µg approved for the treatment of IBS-C, do you think we can use this dose in another subset of patients? Which ones? How will this new dose impact your use of lubiprostone?

   ***Jonathan Kaunitz, MD**: Lubiprostone was FDA-approved for the treatment of IBS-C in adult women at a 18 µg/day dose, based on the findings of large multicenter trials. This dose provided significant improvement in IBS-C symptoms, such as SBM [spontaneous bowel movement] frequency, straining, and discomfort on a 7-point IBS-C symptom scale. Lubiprostone at this dose is not approved for any other patient group.*

6. Regarding opioid-induced constipation, do you use a combination of medications as treatment? If so, what do you build your combinations around and how does lubiprostone fit into the mix?

   ***Julia Pallentino FNP**: In treating opioid-induced or chronic constipation, I use a combination of medications to achieve the desired result. It is best to anticipate that opioids will cause constipation and to take action before initiating opioid medications, although this rarely happens. A stool softener plus a stimulant laxative may be necessary. I will start with over-the-counter stool softeners and stimulants in combination. If these are ineffective, I may prescribe lubiprostone in combination with these medications. Lactulose may be effective when other interventions are unsuccessful. I often find that the most difficult part of treating these individuals is getting them to take the medications that may prevent or resolve their constipation.*

7. Have there been positive results in IBS-C in the linaclotide phase 2b trials regarding eliminating bloating and pain? Is diarrhea a problem with linaclotide? Where will you use it in therapy?

   ***Satish Rao, MD:** There are limited data regarding the linaclotide studies, and the one that was published by Dr. Camilleri showed improvement in IBS-C. But this was a very short, 5-day study. Diarrhea is the one reported side effect with linaclotide, as it is a secretagogue similar to lubiprostone. I think that we should await phase 3 trials before judging fully the efficacy, safety, and therapeutic benefits of linaclotide.*

8. I have a 35-year-old male patient with a known c-spine [cervical spine] injury from a traffic accident who is now in a vegetative state and presents with chronic constipation. I am unable to treat him successfully with laxative and behavioral therapy. What would you recommend with respect to treating this patient?

   ***Satish Rao, MD:** This is a challenging clinical problem, especially in a young male. I would optimize conservative therapies with maximum doses of laxatives and, in this situation, stimulant laxatives, such as bisacodyl or lubiprostone, at higher doses of 24 µg BID or even TID, and/or a combination with polyethylene glycol*

(PEG). If such patients do not respond to this, you have 2 alternatives. One is to consider a cecostomy and to use glycerin/saline infusion through the cecostomy every 3 to 4 days, as this would prevent the need for PEG-3350 (and electrolytes for oral solution) treatment. Alternatively, some of these patients are best served by a colostomy, in which case it would become easy to manage the patient with laxatives.

9. Are hemorrhoids always secondary to constipation, or can hemorrhoids produce constipation?

   ***Henry Parkman, MD**: Hemorrhoids are often thought to be due to constipation and the excessive straining. However, this is not always the case. Some patients with diarrhea may also have hemorrhoids.*

   Hemorrhoids may, in some instances, cause constipation. For example, painful excoriated hemorrhoids may cause constipation if it is painful for the patient to have a bowel movement. A patient may voluntarily try not to have a bowel movement to prevent the pain.

10. In your practice, do you have a protocol for using laxatives, PEG, bisacodyl, and lubiprostone? Any others? Do you ever use a combination?

    ***Julia Pallentino FNP**: In my practice, I do not follow a strict protocol. When lifestyle measures and dietary and fiber interventions have failed, I will suggest milk of magnesia and polyethylene glycol as the next step. Then I will institute prescription medications, including lubiprostone and lactulose. I usually begin prescription medications alone and then move to combinations when singular medications fail.*

11. Are there differences among lactulose, PEG, and magnesium salts? At what point do you decide they are not effective?

    ***Adil Bharucha, MD:** They are all osmotic agents that improve stool frequency and consistency in patients with chronic constipation. The evidence is stronger with lactulose and polyethylene glycol than with magnesium salts.*

    Perhaps 6 to 8 weeks after reaching an adequate dose is when I decide that these agents are not effective.

12. Do you ask your patients to stop taking laxatives and fiber when doing a sitz marker test?

    ***Adil Bharucha, MD** Yes, I ask them to discontinue 2 days before and throughout the testing.*

    ***Julia Pallentino FNP**: I do not typically ask patients to stop taking fiber. I will ask them not to take laxatives while undergoing a sitz marker test.*

13. Can you discuss the balloon expulsion test further, regarding where to buy it and if insurance will pay for it?

    Satish Rao, MD: *Unfortunately, there is no commercially available balloon in the United States, although a balloon with a catheter is available in Europe and is somewhat expensive…up to $15. There is no reimbursement for this. Although one can make a small claim for the equipment through the hospital side, because very little physician time is involved, there is no CPT code or insurance coverage. We make up a balloon in our own lab by attaching either a finger cot or a party balloon to a catheter tube. This is normally wet with some warm water and is placed up to 8 cm inside the rectum. The subject is then seated on a commode. The balloon is distended with 15 mL of warm water. A stop watch is started, and the patient is given privacy to expel this on a commode over a 5-minute period. Normal subjects can expel this in less than a minute.*

14. The sensitivity of balloon distension as a marker of dyssynergic defecation is low. Does this mean one needs to do the whole anal manometry test for evaluation of patients?

    Satish Rao, MD: *The diagnosis of dyssynergic defecation depends primarily on the demonstration of a pattern of dyssynergia with manometry or electromyography testing. Hence, manometry is an essential component of this diagnosis. Symptoms, digital rectal examination, and a balloon expulsion test provide corroborating evidence, but are not a substitute for manometric demonstration of dyssynergia. Because impaction with dyssynergia can sometimes be seen in up to 15% of healthy individuals, especially when attempting to defecate in the lying position, it is important for the manometric test to be performed in the sitting position, and supportive evidence in the form of abnormal balloon expulsion tests and/or delayed colonic transit is required.*

15. Is there any evidence that setting up time to be in the bathroom makes a difference? What do you do with people who do not have the "time"? How does setting up time work?

    Julia Pallentino FNP*: There is little or no evidence that setting up time in the bathroom makes a difference in treating constipation. However, when a history suggests that that an individual has a lifestyle that leaves little opportunity for a bowel movement, I will suggest making time as an intervention. Another problem I encounter is the patient who will not make time before leaving for work or school, and then will not use public restrooms when an urge presents. For this population, I strongly suggest a regimen of making time for bowel movements. I also suggest warm liquids in the morning as an added stimulant, even though I have no scientific evidence for this suggestion. More than a few patients have found this to be helpful.*

16. Isn't lubiprostone an expensive pill that is similar to polyethylene glycol? They both work by increasing fluids in the colon. What is the main difference other than price?

    ***Jonathan Kaunitz, MD**: PEG is a nonfermentable osmotic laxative. Lubiprostone increases intestinal ion secretion. They both increase intestinal fluid volume by different mechanisms.*

17. Dr. Rao discussed the tests with the patient. Before the tests were performed, did you give the prescription for polyethylene glycol [PEG] to her? What is the need for additional tests?

    ***Satish Rao, MD**: As you may have heard on the video, as we were waiting for the tests to be performed and to relieve the patient's symptoms, we did initiate treatment with polyethylene glycol. Unfortunately, this was not helpful in this particular patient. She tried this for several weeks even before seeing me and even after seeing me, but did not find it helpful. Consequently, she has significant refractory chronic constipation, and it was essential for us to proceed with the evaluation to define a clearer path of physiology for her condition.*

18. I have a 28-year-old deaf female with chronic constipation currently taking 25 bisacodyl tabs BID to achieve a bowel movement (diarrhea). I had her try polyethylene glycol and lubiprostone, and neither worked. I also performed a sitz marker test at 4 days (could not hold out to day 5)…markers scattered all around. Normal colonoscopy, no other meds. Did not evaluate for dyssynergia. Any comments?

    ***Adil Bharucha, MD**: As you suggest, the next step is to evaluate for defecatory disorders.*

19. The presentation of the lubiprostone data in chronic constipation and IBS-C illustrated significance among the primary endpoints of SBM. Were the other symptoms of chronic constipation and IBS-C significantly improved versus placebo?

    ***Satish Rao, MD**: Lubiprostone 24 µg BID in patients with chronic constipation and 8 µg BID in patients with IBS-C has been shown to differ significantly compared with placebo with regard to the primary endpoints. In chronic constipation the primary endpoint was the number of spontaneous bowel movements per week, and in IBS-C the endpoint was adequate relief of symptoms. Both of these endpoints were significantly higher with lubiprostone than with placebo.*

20. Is it feasible to perform biofeedback in solo practice, or is this meant to be used in centers? How can you learn about this topic?

    ***Satish Rao, MD:** Biofeedback can be performed in solo practice but will require a dedicated team. You will need a fully trained nurse and you should make some time available to spend with the patient. It is not a procedure that is performed*

primarily by a physician, but mostly by nurses or by a physical therapist. However, it is essential that you, as a physician, provide the necessary support and care, and make yourself available for a period of the time to spend with the patient, as well as reporting the findings of the training program. Hence, you should embark on this program provided you have the time to do so. It can be performed in solo practice and will not require extensive equipment. Regarding training, unfortunately, there are very limited training options, but centers such as ours offer periodic workshops and this would be one good way to learn about this. Ideally, the physician and the nurse have to be present during the 2- or 3-day workshops that we offer at The University of Iowa, and I believe similar workshops are offered at similar centers. You can also contact the American Neurogastroenterology and Motility Society for additional information on biofeedback. http://www.motilitysociety.org/

21. What motility dysfunction is present in IBS-C? Is it normal or can there be abnormalities on anal manometry?

***Adil Bharucha, MD**: IBS-C may be associated with abnormal colonic sensation and/or excess phasic motility in the sigmoid colon, which may retard colonic transit. Anorectal dysfunctions, if present, are due to an associated defecatory disorder, not to IBS-C per se.*

22. How do you integrate efficient care and the use of other medical personnel in primary care?

***Henry Parkman, MD**: Use of nurse practitioners may help improve patient care in a busy medical practice. Nurse practitioners can help see and treat patients. They can also assist with returning telephone calls on a timely basis.*

***Julia Pallentino FNP**: I find that the nurse practitioner is often the health care professional who finds the time to effectively treat patients with chronic constipation or IBS-C. Our communication skills serve us well in counseling patients with these types of chronic issues. While they are not life-threatening, they significantly alter the quality of life.*