# **CO's CURE** Case Study: Abdominal Pain

Authors: Bonnie Wilensky, APN, RN, CNS, MSN, CCM, Racheal Duncan, PharmD, BCPS, BCCCP, and Diane Rossi MacKay, MSN, RN, CPHQ

## Learning objectives:

- 1. Use functional goals to assess response during treatment of the patient's abdominal pain.
- 2. Discuss strategies to engage the patient in an ALTO vs. opioid-based treatment.
- 3. Utilize the SHM ALTO abdominal pain pathway to propose an integrated, multimodal, holistic treatment plan.

**Introduction**: The following abdominal case study is presented as an opportunity to engage in team-based care conversations to develop an evidenced-based, holistic, multi-modal treatment plan using the SHM ALTO pathways.

### **Case Presentation:**

Mary, a 38-year-old woman with chronic abdominal pain due to irritable bowel syndrome (IBS) presents to the emergency department (ED) with an exacerbation, stating she is having a "flare" of her IBS and can no longer manage her pain at home. She has been unable to keep food down for 48 hours, only tolerating small sips of water. Mary took 6mg of ondansetron ODT and 12.5mg of promethazine 30 minutes prior to arrival, which helped some with the nausea, but Mary is still having severe abdominal pain along with cramping, gas, bloating and intermittent diarrhea. Mary indicates she has been under a lot of stress at work and has not been able to exercise or attend social events, which has led to depression.

Mary describes her symptoms, especially the pain and abdominal cramping as constant. She is curled up in a ball on the bed whimpering. Mary is drowsy from the medications, however alert enough to inform the ED team that the only thing that has helped with her IBS flares in the past is IV morphine. She has no significant co-morbidities and only takes a multivitamin daily. The ED clinician orders a CT scan, which shows no evidence of inflammation, masses or surgical issues. The ED clinician orders and the ED nurse administers one dose each of dicyclomine 10mg IM and ketorolac 15mg IV. This increases her comfort enough that she can sit up but is still unable to tolerate anything by mouth. Due to her inability to tolerate fluids by mouth and ongoing lack of pain control Mary is admitted to the medical/surgical unit for further workup and care. Of note, Mary reports a change in diet. She loves the fresh fruits and vegetables of summertime, so she has been eating an abundance. Mary said this most recent flare coincides with all the fiber she has been eating lately.

Upon arrival to the floor, the provider reviews the abdominal pain pathway and consults with the RN and pharmacist. The team sees that there are multiple non-opioid options from which to choose. The nurse suggests a heating pad as a first line, non-pharmacologic therapy. The team agrees a heating pad is a good choice. The nurse discusses with Mary that this strategy can also be used when she is discharged home. The nurse places a heating pad on her stomach for the first few hours of admission and works with Mary to establish a realistic treatment plan that will lead to eventual discharge. However, Mary indicates she is in too much pain to even think about going home. Mary insists on seeing the provider and specifically requests IV morphine, stating that it is the only thing that has worked in the past. Mary begins to cry uncontrollably.

Prior to seeing the patient, the team discusses the best options and together they begin to create a step-by-step plan appropriate for the patient.









#### **Discussion Points:**

Due to the lack of evidence supporting the use of opioids for chronic abdominal pain, IV morphine should not be used as first-line therapy, however Mary is insistent. How can you address this?

- 1. Mary states she cannot keep food down, and you agree that it is a reasonable goal that she be able to tolerate a piece of toast and apple juice in order to consider discharge (avoid assigning a number to her pain, but rather a functional goal). How and when would you recommend the clinical team address this issue before discharge?
- 2. Mary needs to transition to oral therapy. You both agree the sooner she is using only oral medications to alleviate her symptoms, the closer she will be to going home. Mary is not totally convinced she is ready for oral medications. What strategies could the team employee now? When thinking about a diagnosis such as IBS, ALTOS may not always be the answer. How will you know in Mary's case? What types of things go through your mind as a provider when thinking about a case like Mary's?
- 3. Constipation has not been a problem with this episode, however Mary is experiencing intermittent diarrhea, severe gas and bloating. What are some next steps to consider during and post discharge?
- 4. Mary's mental state and diet both need to be addressed prior to discharge. Mary does not believe she needs help in either of these areas. What resources would your team begin to utilize in order to have a successful discharge? What will the conversation look like with Mary?

### Further Discussion/Treatment Options:

The team decides it is best if the provider visits with Mary alone. The provider takes a few minutes to sit with Mary at the bedside. As the provider is listening to Mary, he/she observes for signs of substance use disorder and depression. Prior to leaving, the provider does a thorough physical exam and pain assessment being tuned into Mary's non-verbal cues. The extra time the provider spends with Mary seems to reduce her anxiety. The provider explains to Mary the next steps in her treatment plan and asks for her input. Mary's attention immediately switches away from her pain to a quick discussion about her plan of care.

The provider discusses findings and next steps with the team. He/she decides to start by having the nurse give Mary one additional dose of ketorolac 15mg IV. The nurse explains to Mary that this is specifically targeting pain and inflammation that may be contributing to her discomfort. The provider also decides to order famotidine 20mg IV, which the nurse explains to Mary that this will reduce any stomach acid that may be acting up. When Mary asks about the possibility of receiving morphine IV, the nurse explains that opioids cause significant nausea and constipation, which would be counterproductive to her current issue. Mary is willing to go along with the treatment plan, for now.

Since the patient has already taken ondansetron for her nausea prior to coming in, the provider decides to try a different anti-emetic, called metoclopramide, 5mg IV. The nurse administers the medication, explaining to Mary it will reduce nausea and will alleviate the pressure, bloating and discomfort in her gut. Mary asks if the medication will cause diarrhea because she has been having intermittent diarrhea lately. The nurse explains diarrhea is a potential side effect, but Mary is receiving a one-time, small dose so side effects are unlikely. The nurse explains to the patient that the combination of these medications will make her more comfortable, and the nurse will be in to check on her in 30-45 minutes to assess her level of comfort.

At that point, since Mary is complaining specifically of cramping, the provider has written for a repeat dose of IM dicyclomine 10mg along with a dose of acetaminophen 1000mg PO if she is able to tolerate it. The nurse is unfamiliar with dicyclomine, so calls the pharmacist to discuss the appropriate administration of the medication and any possible side effects. The pharmacist cautions that the dicyclomine injectable can be given IM only (not IV) and that it should help to reduce the GI spasms that the patient is experiencing. The nurse relays this information to Mary and explains that, once her symptoms are controlled enough to keep a glass of electrolyte solution down, the provider will transition each of the therapies that the patient found helpful to an oral version.







In the meantime, the nurse talks with the case manager to assist with discharge planning. After a brief discussion, the nurse and case manager decide it might be a good idea to bring in the mental health social worker for an assessment of Mary's emotional state. The nurse speaks with the provider to keep the provider abreast of everything that is taking place with Mary's care. The mental health social worker speaks with Mary and recommends a dietary consult to assist Mary with strategies on how to weave in the summer foods she loves without triggering another IBS flare. The mental health social worker also recommends a referral to a behavioral health therapist to develop coping strategies for her chronic condition.

The provider visits with Mary to explain treatment options. At first, Mary is a little nervous, but agrees the multimodal treatment plan is the best way to go. Mary indicates she has a sister Cindy, who lives close. Mary starts thinking about all the things she and Cindy could start doing together. Mary is on board with this well thought out plan, understanding that the provider has prescribed multiple therapies, which are being used together to try to increase her comfort and get her safely home.







