WEB EXCLUSIVES

House Call

BY JAY THOMAS, MD, PHD

Question: How do you treat constipation caused by pain-relieving opioid use?

Answer: Opioids are commonly used to treat cancer-related pain, which is experienced by nearly 90 percent of patients. These drugs, which include morphine, hydrocodone (Vicodin, Lortab) and oxycodone (Percocet, OxyContin), bind to receptors in the brain and spinal cord to bring relief. But they also bind to receptors in the gut, which can lead to constipation in about half of patients.

While the human body can adjust to many opioid-induced side effects, such as nausea, the body never becomes tolerant to the constipating effects of the opioids. Opioids disrupt the normal contractions of the bowel, resulting in stool staying in the body longer and becoming harder and dryer as the body absorbs water out of the stool.

Because constipation can be reliably predicted when using opioids on a continuous basis, a bowel regimen should start at the same time as opioid use. Typically, two medications are given: a stimulant, such as Senokot (senna), which increases the contractions of the bowel, and a stool softener, such as Colace (docusate), a pill that breaks up the fat content in stool so water can more effectively penetrate it. If constipation remains despite these medications at reasonable doses, lactulose is often added. Lactulose works by using the physical property of osmosis to pull water into the intestines. The goal of these interventions is to keep the intestines contracting and to soften the stool.

If constipation is present before starting opioids, there may be an impaction or a dam caused by hard, dry stool. In this case, rectal interventions, such as enemas and suppositories like Dulcolax (bisacodyl), are often needed in conjunction with the above oral medications to break the dam.

The goal would be to specifically reverse the negative effects of the opioids on the intestines without reversing the beneficial effects on pain, and the good news is that new agents, such as methylnaltrexone, are doing exactly that. Methylnaltrexone is a novel drug in development that can’t cross the barrier that separates the brain and the spinal cord from the rest of the body. Its unique chemical structure allows the drug to knock the opioids off the intestines without affecting the pain control in the central nervous system. A recent study looked at patients with advanced medical illness who had opioid-induced constipation. About 60 percent of the patients who received methylnaltrexone had a bowel movement within about one hour. The average time to a bowel movement for patients taking a placebo was more than 24 hours. Although some patients experienced nausea and dizziness, no patient had signs of increased pain or

opioid withdrawal.

Studies with oral forms of methylnaltrexone and a similar agent called Entereg (alvimopan) are under way. Thus, together with current medications, these new agents may help doctors not only treat but prevent opioid-induced constipation in cancer patients and prevent the immense suffering that is associated with it.

—Jay Thomas, MD, PhD, is an associate clinical professor of medicine in the Cancer Symptom Control Program at the University of California, San Diego.