Written By: Neal Dave, PharmD and Julianne Orr, PharmD
NCODA Spring Forum PQI Workshop

Positive Quality Intervention: Opioid Induced Constipation

Description of PQI: Discuss the prevention and management of opioid induced constipation.

Background: Constipation is a major side effect of opioid administration and should be assessed and managed by the healthcare team. In cancer patients receiving chronic opioid therapy, the prevalence of constipation can be as high as 60 to 90 %. Constipation is the most common manifestation of opioid induced bowel dysfunction (OBD) and typically occurs through activation of both peripheral and central opioid receptors. Opioid induced constipation (OIC) has the potential to effect patients' quality of life or lead to complications such as bowel obstruction or anorexia.

PQI Process: Once a prescription for an opioid is obtained:

- Assess the medications patients are currently taking
  - Look for causative medications in addition to opioids
  - If patient is already on an agent that is notorious for causing diarrhea, there may be no need for prevention of OIC
- Educate patient on opioid induced constipation
  - Symptoms of constipation
    - Straining
    - Lumpy or hard stools
    - Sensation of incomplete evacuation
- Consider adding preventative agents:
  - Docusate/Senna: Two tablets (17.2 mg sennosides plus 100 mg docusate) by mouth once daily
    - Max dose of senna: 68.8 mg by mouth twice daily
  - Polyethylene Glycol: 17 g orally 4-8 oz of water daily
  - Lactulose: 30 mL by mouth daily (avoid in patients who are lactose intolerant)
- Pharmacologic options once preventative measures are ineffective, consider use with discretion as clinical efficacy varies:
  - Magnesium citrate: 195 – 300 mL by mouth given once or in divided doses
    - Consider milk of magnesia if citrate is unavailable
  - Methylnaltrexone (Relistor®): Dosing is according to body weight; Administer one dose subcutaneously once every other day as needed (Max: 1 dose/24 hours)
    - <38 kg: 0.15 mg/kg rounded to the nearest 0.1 mL
    - 38 to <62 kg: 8 mg
    - 62 to 114 kg: 12 mg
    - >114 kg: 0.15 mg/kg rounded to the nearest 0.1 mL
  - Naloxegol (Movantik®): 25 mg by mouth once daily
    - Can decrease to 12.5 mg if 25 mg not tolerated
  - Lubiprostone (Amitiza®): 24 mcg by mouth twice daily

Patient Centered Activities:

- Provide **Oral Chemotherapy Education (OCE)** Supplemental Sheet
- Non-pharmacologic counseling
  - Increase fluids

        - Common recommendation for water consumption is eight 8-ounce glasses, which is about 2 liters (or a half gallon) per day
        - Caffeine can contribute to dehydration
    - Increase fiber
        - USDA fiber intake recommendation is between 25-38 g per day
    - Modifying diet
        - Eat several small meals throughout the day, rather than a few large ones
        - Avoid fatty, processed meats, and fast foods
        - Consuming natural laxatives:
            - Prunes, apple cider, bran cereals, watermelon, rhubarb, etc
    - Increase activity
        - Exercise can increase circulation, which can naturally accelerate movement of stool
    - Consider offering diet counseling books (ex. “Eating Well Through Cancer”)
    - Taking preventative agents daily
- Patient Medication Education
    - Review maximum daily doses of any agent the patient starts
    - Relistor® – make sure the patient is aware that an instant bowel movement is possible after they receive their injection

References:

1. Poulsen et al. Therap Adv Gastroenterol. 2015 Nov;8(6):360-72.
2. Dhingra et al. Palliative Medicine. 2012 June;27(5):447-457.