

Constipation is defined as infrequent or difficult evacuation of feces; bowel movement every 3-4 days or less. Constipation is the most common opioid side effect and tolerance rarely develops. Prophylaxis should be considered when starting opioid therapy regardless of the drug, route, schedule or dose. Simple interventions [e.g., fiber, fluids, exercise, stool softeners (docusate)] are generally insufficient. The standard prophylactic regimen includes a stool softener and a stimulant laxative.

Patients should be encouraged to maintain a regular routine including a diet rich in fiber, adequate fluid intake, exercise, and toileting privacy with a regular time of day to attempt defecation whenever possible. In the absence of adequate fluid intake, bulk laxatives such as psyllium (Metamucil®) can cause fecal impaction and should be avoided. There is also some evidence to suggest that switching to fentanyl or methadone may be helpful. Oral opioid antagonists such as naloxone or naltrexone may have a beneficial effect on opioid-induced constipation, but have limited use because of the risk of opioid withdrawal.

Be aware of other medications that can contribute to constipation including anticholinergics such as scopolamine, drugs with anticholinergic side effects such as the tricyclic antidepressants, the phenothiazines, first generation antihistamines such as diphenhydramine, calcium channel blockers (especially verapamil), oxybutynin, bismuth, iron, aluminum, and calcium salts.

Table 1: Recommended treatments for opioid induced constipation

Dosage Schedule	Drug	Brand Names	Dose
Daily	Senna-docusate 8.5-50mg per tablet	Senokot	2 tablets orally 2 times per day (Hold for loose stool)
PRN – 1 st Line	Magnesium hydroxide	Milk of Magnesia	30mL orally 2 times per day as needed
	Polyethylene glycol	Miralax	17grams dissolved in 8 ounces of water, juice or tea once daily as needed
	Bisacodyl	Dulcolax	10mg orally once a day as needed for constipation
PRN – 2 nd Line	Phosphate enema	Fleet enema	120 mL rectally once a day as needed for constipation
	Magnesium citrate		150 to 300 mL (1.745 g/30 mL solution) mL orally once a day as needed for constipation

(1)*Table adapted form AGA technical review on constipation: Gastroenterology 2000;119(6):pp1766-78

What about methylnaltrexone (Relistor®)?

Methylnaltrexone is a peripherally acting opioid antagonist. Because it does not cross the blood brain barrier it does not affect the analgesic effects of opioids nor will it precipitate withdrawal. It is indicated for the treatment of opioid-induced constipation in patients who are receiving palliative care when

response to usual laxative therapy has not been sufficient. Methylnaltrexone is given subcutaneously at a dose of either 8mg or 12mg, according to the patient's weight, and should be added to existing laxative therapy.

What about alvimopan (Entereg®)?

Alvimopan is a potent antagonist of peripheral mu opioid receptors. It is used as prophylaxis to reduce postoperative ileus in patients undergoing partial colectomy, bowel resection, or total abdominal hysterectomy. It has been shown to inhibit morphine-induced decreases in gastrointestinal (GI) transit time, but has no effect on postoperative morphine analgesia. It is given at least 2 hours (hr) before surgery and then twice daily starting on postoperative day 1 and continuing until hospital discharge or for a maximum of 7 days. Oral doses between 0.5 mg and 1.5 mg once daily have been effective for opioid-induced bowel dysfunction, with larger doses of 6mg and 12mg twice daily under investigation for postoperative ileus.

References

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