Side Effects of Opioid Medications and General Approaches to Management

The side effect of common pain treatments can be a deterrent for good pain control --- especially with older adults who are physically vulnerable. Dosing of opioids in particular should start low and be slowly increased to minimize harmful side effects like sedation and delirium. Certain expected side effects such as drowsiness and nausea often resolve after a few days of use or modifying administration times, while other side effects like constipation are not anticipated to resolve. In response, prolonged side effects should be proactively treated with further medication management. The following table provides an overview of common pain medication side effects and associated management strategies for both persistent pain issues and end of life situations, to be considered alongside the older adult's goals and preferences.

Side Effects	Management/Comments
CNS: Drowsiness and change in cognition	• Generally resolves within 72 hours of initiating new opioid medication or increasing doses. • If drowsiness/decrease in cognitive function persists, consider other CNS - acting medications that may be worsening this side effect. Also need to rule out other correctable causes (e.g., infection, dehydration, metabolic imbalances). If side effects persist, but pain relief is achieved, cautiously consider the possible benefit of psychostimulants. Adjust dose and timing to avoid nocturnal insomnia and monitor for psychotomimetic effects (e.g., hallucinations, agitation, irritability) o Dextroamphetamine 2.5 - 5 mg PO q am and midday o Methylphenidate 5 - 10 mg PO q am and 2.5 - 5 mg PO midday
CNS: Respiratory Depression	• Common fear, but actually very rare when opioids are used for routine persistent pain. Nurses should note that changes in respirations at end of life are to be anticipated. • When depressed consciousness along with RR less than 8/min is associated with opioid use, slow cautious titration of naloxone should be instituted (0.5 mL over 2 minutes). See “Naloxone Administration in Adults” (used with permission from Pasero C, McCaffery M: *Pain assessment and pharmacologic management*, pp. 521, 2011, Mosby Inc. Copyright 2011), for further details on naloxone use in adults.
CNS: Delirium	• Determine etiology - organ failure versus drug effect. Delirium is anticipated at end of life and predominately related to organ failure. Use appropriate assessment tools to monitor delirium, such as the Confusion Assessment Method (CAM).

Side Effects	Management/Comments
GI: Nausea	• Encourage the patient to lie down • Generally resolves within 72 hours of initiating new pain medication. • Non-pharmacological treatments include: o no foods at extreme temperatures o taking medication with food o avoid spices in foods o avoid strong odors o increase circulating air o cool towel to head/neck o ginger • Ensure patient is not constipated. • Opioid induced nausea can be treated with 5HT3 antagonists, such as ondansetron.
GI: Constipation	• Consider one or more of following: o Senna + docusate (Senokot S) 1-2 tabs BID o MOM 30-60 cc BID to TID o Lactulose 30-60 cc BID to TID o PEG solution: Miralax 1-4 T QD or 4-8 oz of GoLytely titrated to effect. o Inquire about the appropriateness of a chloride channel activator, such as lubiprostone. o Inquire about the appropriateness of an opioid antagonist, such as nalexogol. • STEP UP: If symptoms of constipation continue, double dose of regimen above OR add 2nd agent such as Lactulose or Miralax. • Bulk Laxatives are not recommended (Metamucil) due to the increased risk of bowel obstruction with decreased fluid intake.
GI: Myoclonus (involuntary muscle twitching)	• Can occur with high-does opioid therapy. • Switch to alternate opioid, especially if using morphine. If change in opioid does not improve symptoms, consider the following: o Clonazepam 0.5 -1 mg PO every 6-8 hours o Lorazepam SL if unable to swallow
GI: Pruritus (itching)	• Most common with morphine, but can occur with other opioids. For most people, pruritus is a side effect, not an allergy, although patients may report an allergy to opioids when they have experienced itching. • Antihistamines (e.g., diphenhydramine, loratadine) common first-line approach, but potential for resulting sedation must be considered. Patients may also benefit from cool compresses and/or moisturizers.

References

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3. *Bowel Routine, Opioid Use Guidelines Pocket Guide*, New Hampshire HPCO, 2006.
4. William D. Dhey, M.L. (2014). Naloxegol for Opioid-Induced constipation in Patients with Noncancer Pain, *N Engl J Med.*

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