Treatment of Acute Pain in Opioid Use Disorder

The FAQ below covers common clinical questions that arise about treating pain in patients with OUD. Keep in mind that high-level evidence to guide management in these patients is lacking.[4] Most of the information below is based on expert opinion. For information on non-opioid options, see our chart, *Analgesics for Acute Pain in Adults*.

Clinical Question	Pertinent Information or Resources
What are some special **considerations for patient assessment** before treating acute pain in this patient population?	• Identify all opioids the patient might be using. Check your prescription drug monitoring program, and perform a urine drug screen that includes methadone, buprenorphine, and fentanyl.[4] • Obtain a pain history.[4] • Identify any medications which, if discontinued, could cause withdrawal symptoms.[4] This would be of particular concern if the patient is going to surgery. • Ask about comorbidities, including psychiatric disorders.[4] ○ Psychiatric comorbidities may complicate pain control.[4] Brief screening tools validated in the primary care setting can be used to screen for depression, anxiety, and substance abuse.[4] • Consider comorbidities when choosing non-opioids (e.g., consider anticonvulsants if the patient has neuropathic pain).[18] • Assess pain using your institution's usual pain assessment tool.[2]

What are some **points to address with patients** with opioid use disorder regarding acute pain treatment?	• Patients with OUD may have the following concerns regarding control of acute pain:
	  ○ fear that their pain will be untreated or undertreated.[5]
	  ▪ Reassure the patient that their pain will be treated in the context of shared decision-making.[2,12]
	  ▪ Explain that although being pain-free is not the goal, being functional is a reasonable expectation.[2]
	  ○ fear of relapse triggered by exposure to opioids or untreated pain.[5]
	  ▪ Nonopioids will be optimized.[5]
	  ▪ In acute care settings, parenteral formulations will be switched to oral as soon as possible.[5]
	  ▪ If needed, opioids will be titrated to effect with careful monitoring for side effects, and tapered off as pain resolves.[2,5]
	  ○ fear that if they need to be treated at a hospital or emergency department, they will miss doses of their substitution therapy (buprenorphine or methadone).[5]
	  ▪ Opioid substitution therapy will be continued (after dose verification) or replaced with an opioid for pain.[5]

Clinical Question	Pertinent Information or Resources
What is the **general approach to treatment** of acute pain in patients with opioid use disorder?	• Individualize the treatment plan, taking into account patient preferences.[12] Patients with a history of opioid misuse may not want to take opioids.[12] • Patients with a history of opioid misuse are at risk for relapse triggered by anxiety or pain associated with injury or surgery.[4] Therefore, pain control in these patients requires planning (when possible), education, monitoring, and increased support.[4] o Consult the pain management service perioperatively.[4] o Involve the patient's family and the patient's MAT prescriber (if applicable).[2,4] o Consider referral to a substance abuse clinic.[4] Arrange this before hospital discharge.[4] • Keep in mind that some non-opioids (e.g., gabapentin) pose abuse risk.[24] • Prescribe/dispense opioids in small quantities (e.g., three to seven days).[2] Consider enlisting a reliable family member to serve as the custodian of the medication.[21] • In the hospital, switch from parenteral to oral opioids as soon as possible.[2] The oral route is less reinforcing.[5] • Taper opioids as pain resolves.[2] • Refer for addiction treatment.[2] See our chart, *Management of Opioid Use Disorder*, for information on MAT for OUD. • Educate patients about opioid overdose, and strongly **consider prescribing naloxone**.[2]
What are some special considerations for treating pain in patients actively abusing an opioid (e.g., **heroin)**?	• Accurately assess the patient's current opioid use and convert to morphine equivalents.[18] This can be used as the patient's baseline opioid requirement.[18] Additional opioid will be added for analgesia.[18] o See our chart, *Equianalgesic Dosing of Opioids for Pain Management*. o Be aware that potency and purity of street **heroin** varies, and that the weight of heroin is not the same as the dose of heroin.[2] ▪ One rule of thumb is that one bag of heroin is approximately equivalent to 15 to 30 mg of parenteral morphine.[2] Due to tolerance, patients may need to be dosed with a parenteral or oral opioid every two to three hours, as needed for pain or withdrawal.[2] • Example: a patient using a bag of heroin daily might require 2.5 to 5 mg of IV morphine every three hours, plus non-opioids to reduce opioid requirements.[2]
How should pharmacists handle **acute opioid prescriptions** for patients with a history of opioid use disorder?	• Consider contacting the prescriber if more than a week's supply of opioid is prescribed. • Consider providing naloxone. • If the patient is on MAT, ensure that the MAT prescriber is aware of the opioid prescription. • If the prescriber of the acute opioid prescription is not the patient's usual prescriber, ensure that their primary care prescriber is aware of the prescription. • If a MAT patient's buprenorphine regimen has been changed to address acute pain (e.g., higher dose, more frequent dosing), a new prescription might be needed for insurance coverage. Chose the most appropriate buprenorphine product to provide the patient's new dose to avoid cutting tablets or films.

Clinical Question	Pertinent Information or Resources
How do you treat acute pain in patients receiving **buprenorphine** MAT?	**Patient taking buprenorphine/naloxone**: • Try non-opioids first.[6] Topicals are an option for some types of pain. Tramadol is sometimes used, but there is no proof it is a better analgesic choice than an NSAID or acetaminophen. Tramadol use also has risks (e.g., abuse). • Prescribers can divide the total daily buprenorphine dose every six to eight hours to enhance buprenorphine's analgesic effects.[9,20] (Buprenorphine's long half-life and high receptor affinity allows once-daily dosing for opioid dependence, but its analgesic effect may only last six hours.[20,22]) This approach allows the patient to continue on a stable buprenorphine dose.[12] More buprenorphine (sublingual or IV) can be added to their maintenance dose for pain in those taking less than 32 mg daily (of sublingual tablet, or equivalent).[7] (Note that the max buprenorphine dose is 24 mg per Canadian labeling.)[8] • High doses of other opioids may be needed to overcome strong mu receptor blockade by buprenorphine, as well as tolerance.[3,9] Hydromorphone or fentanyl (e.g., in inpatients) might be good choices due to their relatively high affinity for mu opioid receptors.[12,20] If buprenorphine is subsequently stopped with mu agonists on board, monitor for sedation and respiratory depression due to mu receptor hypersensitivity.[9] • In **surgical patients**: o Buprenorphine can be continued, and is preferable to discontinuing.[1,11,24] Have patients take their home buprenorphine dose the morning of their surgery, and continue it postoperatively.[3] o For mild to moderate pain, start by adding acetaminophen and an NSAID (if appropriate).[3,16] Also consider temporarily dividing/increasing the daily buprenorphine dose, as described above.[3,9,20] For more severe pain, consider other non-opioid options (e.g., local or regional anesthesia, ketamine, IV lidocaine), short-acting oral or IV opioids (see above), or patient-controlled analgesia (without the basal component).[3,16] ▪ If pain control is inadequate, a reduction in buprenorphine dose (e.g., to ≤16 mg/day) to free up opioid receptors can be tried.[1] o Stopping buprenorphine or reducing the dose before surgery is an option, but little information is available.[24] ▪ If the daily buprenorphine dose is >16 mg, consider tapering to 8 mg BID before surgery, then post-op, restarting at 4 mg BID.[25] ▪ Note that discontinuing buprenorphine increases the risk of OUD recurrence or even death.[1] ▪ If the decision is made to discontinue buprenorphine before surgery, have the patient take the last dose the day before or the day of surgery.[24] Post-op, as pain improves, taper off any opioids, and restart buprenorphine (before discharge, if possible) when the patient is no longer taking a full opioid.[10,12,24] The pre-op dose can usually be restarted if it was held for less than two to three days.[24] o Arrange follow-up with outpatient prescriber.[3] The discharge summary should include information about any opioids administered during admission, any buprenorphine dosage changes, and any opioids prescribed for home use.[3] • If the need for opioids may be of long duration, consider temporary discontinuation of buprenorphine (perhaps with substitution of methadone 20 to 40 mg) to facilitate opioid use.[9]
Continued…	

Clinical Question	Pertinent Information or Resources
Treating acute pain in patients receiving **buprenorphine** MAT, continued	• When restarting buprenorphine after discontinuation, follow an induction protocol.[9] Buprenorphine should not be started until the opioid is stopped.[12] Patients should be exhibiting early symptoms of withdrawal before the first buprenorphine dose to prevent withdrawal precipitated by buprenorphine/naloxone.[9,12] See our chart, *Management of Opioid Use Disorder*, for guidance on buprenorphine induction protocols/dosing and transitioning from an opioid to buprenorphine. **Patient treated with *Probuphine* or *Sublocade***: • Use non-opioid if possible.[13-15] • Can use a "full opioid" if needed, with monitoring for respiratory depression. High doses may be needed.[13-15]
How do you treat acute pain in patients receiving **methadone** MAT?	**Patient taking methadone**: • Try non-opioids first.[6] • If an opioid is needed, the methadone maintenance dose (check with clinic) is considered the patient's baseline, and another opioid is added for pain control.[12] A relatively high dose may be needed.[2] (Note that methadone maintenance can be continued in the hospital; the prescriber does not need a waiver for patients admitted primarily for other reasons.[12]) • Avoid mixed agonist/antagonists or partial agonists like buprenorphine, pentazocine, butorphanol, or nalbuphine; they may precipitate withdrawal.[4,17]
How do you treat acute pain in patients receiving **naltrexone** MAT?	**Patient taking naltrexone**: • Do not prescribe opioids for outpatient use in a patient on naltrexone.[23] If a nonpharmacologic therapeutic modality is used (e.g., physical therapy, massage, acupuncture), the *Vivitrol* injection site should be avoided.[19] • If a patient on *Vivitrol* requires **elective surgery**, try to delay surgery to allow naltrexone levels to drop (e.g., at least four weeks after last injection).[4,19] For oral naltrexone, allow a 72-hour washout.[4] Keep in mind that these patients can have an exaggerated response to any opioids administered perioperatively.[4] o Post-op, if a home opioid is needed, prescribe a limited amount, educate patient about safe use, and coordinate with naltrexone prescriber to ensure close monitoring and resumption of treatment for opioid dependence.[4] • **In an emergency**, naltrexone's effects can be overcome with higher than usual opioid doses. These high doses increase the risk of respiratory depression.[19] If a patient on oral naltrexone requires continued high dose opioids in an emergency, the patient may experience toxicity as oral naltrexone levels wane.[23] Inpatient or prolonged emergency department monitoring is needed so that patients can be monitored by professionals trained in the use of anesthetic drugs, management of respiratory depression, and cardiopulmonary resuscitation (CPR).[19,23]

Abbreviations: BID = twice daily; IV = intravenous; MAT = medication-assisted therapy; NSAID = nonsteroidal anti-inflammatory drug; OUD = opioid use disorder.

Users of this resource are cautioned to use their own professional judgment and consult any other necessary or appropriate sources prior to making clinical judgments based on the content of this document. Our editors have researched the information with input from experts, government agencies, and national organizations. Information and internet links in this article were current as of the date of publication.

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