

Background

- Pain is commonly reported among those in treatment for substance use disorders (SUD). In one [study](#), 23% of single-substance users and 39% of polysubstance users reported current ongoing pain, which is greater than that observed for non-substance users (19%).
- Chronic pain often predates OUD, but the relationship is complex and bidirectional.
- More than [300 million surgical procedures](#) are performed worldwide each year, making perioperative pain management a common clinical challenge. [Patients with OUD](#) represent a growing proportion of the surgical population.

Defining Pain

- Pain is an unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage. Pain is always a personal experience.
- [Chronic pain](#) is characterized by persistent pain lasting more than 3 to 6 months. Chronic pain is associated with greater [disability](#), [sleep disturbance](#) and [anxiety](#).
- [Perioperative pain](#) refers to pain experienced before, during and after a surgical procedure. It includes pain directly related to the surgery as well as pain associated with anesthesia, tissue injury, inflammation and the recovery process.

Types of Pain

Nociceptive/Inflammatory: injury or inflammation (e.g., post-operative pain)

Neuropathic: neural damage, pinching, irritation (e.g., shingles)

Central Sensitization/Nociplastic: central nervous system dysfunction (e.g., fibromyalgia)

General Pain Management

1. Pain Is Real and Should Be Treated

- People with SUD are at high risk for [undertreatment](#) of pain due to stigma, clinician concerns and limited access to care.
- Untreated acute pain, including pain related to surgery, can lead to chronic pain, impaired functioning and increased risk of relapse.

2. Use a Multimodal Approach

- **Non-opioid Medications:** acetaminophen, NSAIDs, topical analgesics, selected antidepressants, anticonvulsants and muscle relaxants.
- **Non-pharmacologic Approaches:** physical therapy, exercise, heat/ice, massage, acupuncture, CBT, ACT and pain education.

3. Match Treatment to Pain Severity and Type of Pain

- **Severity**
 - Mild pain: generally managed without opioids.
 - Moderate pain: opioids rarely needed and only short term.
 - Severe pain: opioids may be appropriate short term while maximizing non-opioid therapies.
- **Type**
 - Pharmacological treatments should differ by pain type. For example, opioids are used primarily for nociceptive pain, while they are not first-line treatments for neuropathic pain and are not recommended for central sensitization/nociplastic pain.

Perioperative Pain Management Specific to Patients Taking Buprenorphine for OUD

Many patients are asked to stop buprenorphine preoperatively or at the onset of acute pain, placing them at high risk for both relapse and a difficult transition back to buprenorphine after acute pain has resolved. To prevent these risks, we recommend the following in alignment with [existing evidence-based recommendations](#):

1. Continue buprenorphine in the perioperative or acute pain period for patients with OUD.
2. For improved analgesia, consider dividing the patient's usual total daily buprenorphine dose into three or four doses per day during the acute pain period.
3. Use a multi-modal analgesic approach (see above).
4. Pay attention to care coordination and discharge planning when making an analgesic plan for patients with OUD treated with buprenorphine.
5. Use an individualized approach founded upon shared decision-making.

Frequently Asked Questions and Answers

Q: Will giving a patient on buprenorphine a scheduled opioid cause withdrawal?

A: No. Buprenorphine binds the mu-opioid receptor more avidly than full agonists, so it does not precipitate withdrawal. A scheduled opioid can still relieve pain in these patients, but the effect is blunted — often requiring a higher dose or a higher-potency agent (e.g., fentanyl, hydromorphone, sometimes high-dose oxycodone).

Q: Do patients on buprenorphine need higher opioid doses than patients not on it?

A: Usually, yes. Some patients are also hesitant to take an opioid at all; a supportive first step is managing pain with a temporarily increased buprenorphine dose (e.g., an additional 8 mg dosed around the time of surgery) plus NSAIDs and acetaminophen as tolerated, before adding a full-agonist opioid.

Q: Can patients on buprenorphine use non-opioid strategies?

A: Yes, and in general they will benefit substantially — see the multimodal, non-opioid and non-pharmacologic options above.

For individualized consultation and educational resources, call 1-855-337-MACS (6227), email macs@som.umaryland.edu or visit www.marylandmacs.org.