

Acute Pain Management for Patients Receiving OAT

Recommendations for Patients Receiving Maintenance Buprenorphine Therapy

Clinical experience treating acute pain in patients receiving maintenance therapy with buprenorphine is limited. Pain treatment with opioids is complicated by the high affinity of buprenorphine for the μ receptor. This high affinity risks displacement of, or competition with, full opioid agonist analgesics when buprenorphine is administered concurrently or sequentially. There are several possible approaches for treating acute pain that requires opioid analgesia in the patient receiving buprenorphine therapy. With such limited clinical experience, the following treatment approaches are based on available literature, pharmacologic principles, and published recommendations. The most effective approach will be elucidated with increased clinical experience. In all cases, because of highly variable rates of buprenorphine dissociation from the μ receptor, naloxone should be available and level of consciousness and respiration should be frequently monitored. Treatment options are as follows:

1. Continue buprenorphine maintenance therapy and titrate a short-acting opioid analgesic to effect. Because higher doses of full opioid agonist analgesics may be required to compete with buprenorphine at the μ receptor, caution should be taken if the patient's buprenorphine therapy is abruptly discontinued. Increased sensitivity to the full agonist with respect to sedation and respiratory depression could occur.

2. Divide the daily dose of buprenorphine and administer it every 6 to 8 hours to take advantage of its analgesic properties. For example, for buprenorphine at 32 mg daily, the split dose would be 8 mg every 6 hours. The available literature suggests that acute pain can be effectively managed with as little as 0.4 mg of buprenorphine given sublingually every 8 hours in patients who are opioid naive. However, these low doses may not provide effective analgesia in patients with opioid tolerance who are receiving OAT. Therefore, in addition to divided dosing of buprenorphine, effective analgesia may require the use of additional opioid agonist analgesics (for example, morphine).

3. Discontinue buprenorphine therapy and treat the patient with full scheduled opioid agonist analgesics by titrating to effect to avoid withdrawal and then to achieve analgesia (for example, sustained-release and immediate release morphine). With resolution of the acute pain, discontinue the full opioid agonist analgesic and resume maintenance therapy with buprenorphine, using an induction protocol.

4. If the patient is hospitalized with acute pain, his or her baseline opioid requirement can be managed and opioid withdrawal can be prevented by converting buprenorphine to methadone at 30 to 40 mg/d. At this dose, methadone will prevent acute withdrawal in most patients and, unlike buprenorphine, binds less tightly to the μ receptor. Thus, responses to additional opioid agonist analgesics will be as expected (that is, increasing dose will provide increasing analgesia). If opioid withdrawal persists, subsequent daily methadone doses can be increased in 5-to-10 mg increments. This method allows titration of the opioid analgesic for pain control in the absence of opioid withdrawal. When the acute pain resolves, discontinue the therapy with the full opioid agonist analgesic and methadone and resume maintenance therapy with buprenorphine, using an induction protocol. If the patient is discharged while full opioid agonist analgesics are still required, then discontinue methadone therapy and treat the patient as stated in the third buprenorphine approach.

If buprenorphine therapy needs to be restarted (buprenorphine induction) after acute pain management (that is, the third and fourth approaches), it is important to keep in mind that buprenorphine can precipitate opioid withdrawal. Thus, a patient receiving a full opioid agonist regularly should be in mild opioid withdrawal before restarting buprenorphine therapy.