

Addiction Medicine in the ICU: Considerations for Starting Buprenorphine in the Intubated Patient

Case 1

- ◆ A patient with OUD on buprenorphine 8mg TID is admitted to the ICU after a severe trauma from a motor vehicle collision, the patient was intubated in the emergency department
 - ◆ Family at bedside says patient was taking buprenorphine up until day of presentation
 - ◆ The ICU asks you if they should continue the patients buprenorphine
- ◆ Would you continue buprenorphine in this patient while they were intubated?
 - ◆ If yes, what regimen would you use
 - ◆ If no, how would you approach restarting buprenorphine after extubation
- ◆ If the patient needed surgery for their injuries would that change you decision?
- ◆ On chart review: the patient has multiple outpatient urine drug screens positive for fentanyl, does this change you decision?

Case 2

- ◆ A patient with OUD, but unknown as to whether they were on MOUD, is intubated in the emergency department after having multiple seizures and is admitted to the ICU
- ◆ Would you start buprenorphine in this patient while they were intubated?
 - ◆ If yes, what regimen would you use
- ◆ Would you start buprenorphine or methadone in this patient if the ICU was having difficulty weaning IV sedation?

Case 3

- ◆ A patient with OUD is intubated after being found unconscious from a presumed opioid overdose and is admitted to the ICU.
- ◆ Would you start buprenorphine in this patient while they were intubated?
 - ◆ If yes, what regimen would you use
- ◆ Does the fact that they were intubated after an opioid overdose change your decision ?

Initiation Strategies

- ◆ 8 hour infusion of 1.2 mg of buprenorphine followed by sublingual buprenorphine 4mg
- ◆ 0.15mg x2 every 12 hours, 0.3mgx2 every 12 hours, 0.6mg every 12 hours then sublingual
- ◆ Day 1: Buprenorphine 450 mcg every 4 h for 4 doses, Day 2: 2mg every 4 h for 4 doses, Day 3: 4 every 4 h for 4 doses, Day 4+: Buprenorphine 8 two times daily indefinitely

References

1. Hills-Dunlap K, McGrath M, Peterson R, et al. Epidemiology of Substance-Related Admissions to ICUs in the United States. *Crit Care Med*. Published online July 30, 2025. doi:10.1097/CCM.0000000000006803
2. Hamata B, Griesdale D, Hann J, Rezazadeh-Azar P. Rapid Micro-induction of Buprenorphine/Naloxone for Opioid Use Disorder in a Critically ill Intubated Patient: A Case Report. *J Addict Med*. 2020;14(6):514-517. doi:10.1097/ADM.0000000000000675
3. Carroll DK, King A, Yakey B, Darling A, Woodcock EA, Wahby K, Wein R, Greenwald MK, Isaacson AR, Dolcourt BA. A Novel Intravenous Buprenorphine Micro-Infusion Strategy: Application in Critical Care and Opioid Use Disorder. *J Addict Med*. 2025 Oct 9. doi: 10.1097/ADM.0000000000001588. Epub ahead of print. PMID: 41063335.
4. Feeney ME, Law AC, Walkey AJ, Bosch NA. Variation in Use of Medications for Opioid Use Disorder in Critically Ill Patients Across the United States. *Crit Care Med*. 2024;52(7):e365-e375. doi:10.1097/CCM.0000000000006257
5. Moore J, Gangemi A. Low-dose Buprenorphine Initiation in an Intubated and Sedated Patient: A Case Report. *J Addict Med*. 2025 Nov-Dec 01;19(6):737-739. doi: 10.1097/ADM.0000000000001488. Epub 2025 Mar 27. PMID: 40145582.