

ADVISORY
OPINION

OPINION: Sub-Anesthetic Ketamine
ADOPTED: 6/2014
REVISED: 2/2018, 4/2019
TEMPLATE REVISED: 8/2016
REAFFIRMED: 8/20, 8/21, 5/22

This Nebraska Board of Nursing advisory opinion is issued in accordance with the Nebraska Nurse Practice Act, Neb. Rev. Stat. 38-2216 (2). As such, this advisory opinion is for informational purposes only and is non-binding. The advisory opinions define acts, which in the opinion of the board, are or are not permitted in the practice of nursing.

Sub-Anesthetic Ketamine

Ketamine is a surgical anesthetic agent used off-label in sub-anesthetic doses for the management of acute and chronic pain conditions. Ketamine is an opioid-sparing option for analgesia with comparatively limited hemodynamic and respiratory suppressive effects. Potential side effects can be anticipated and managed to prevent adverse patient events.

This advisory opinion does not include the administration of Ketamine IV bolus. The reader is referred to the Nebraska Board of Nursing Advisory Opinion for Sedation and Analgesia (2021).

The Board of Nursing recommends the following for standardizing nursing care and optimizing patient safety in acute care practice settings when Ketamine is administered for pain management:

1. Nursing education and competency requirements are defined, including, but not limited to, pharmacologic properties of the medication, patient contraindications and cautions for use, and recognition and management of side effects;
2. There are clearly defined facility policies and protocols including, but not limited to dosing parameters, adjunct medications, patient safety and monitoring, infusion equipment with “guardrail” technology, documentation and patient hand-off between nursing caregivers; and
3. Qualified personnel and equipment are available for resuscitation at all times.

References:

- Allen, C.A. & Ivester, Jr. J.R. (2018). Low-dose Ketamine for postoperative pain management. *Journal of PeriAnesthesia Nursing* 33(4): 389-396.
- Allen, C.A. & Ivester, Jr. J.R. (2017). Ketamine for pain management—Side effects & potential adverse events. *Pain Management Nursing*, 19(6): 372-377.
- Cohen, S.P, Bhatia, A., Buvanendran, A., Schewnk, E.S., Wasan, A.D., Hurley, R.W., Viscusi E.R., Narouze S, Davis F.N., Ritchie E.C., Lubenow T.R., & Hooten W.M. (2008). Consensus guidelines on the use of intravenous Ketamine infusion for chronic pain from the American Society of Regional Anesthesia and Pain Medicine, the American Academy of Pain Medicine, and the American Society of Anesthesiologists. *Regional Anesthesia and Pain Medicine*, 43(5): 521-546.
- Crumb, M.W., Bryant, C. & Atkinson, T.J., (2018). Emerging trends in pain medication management: Back to the future: A focus on Ketamine. *The American Journal of Medicine*, 131(8): 883-886.
- Nebraska Board of Nursing. (2021). *Sedation and analgesia*. Advisory Opinion.
<https://dhhs.ne.gov/licensure/Documents/ProceduralSedationAndAnalgesia.pdf>.
- Schwenk, E.S., Viscusi, E.R., Buranendran, A., Hurley, R.W., Wasan, A.D., Narouze, S., Bhatia, A., Davis F.N., Hooten, W.H. & Cohen, S.P. (2018). Consensus guidelines on the use of intravenous Ketamine infusions for acute pain management from the American Society of Regional Anesthesia and Pain Medicine, the American Academy of Pain Medicine, and the American Society of Anesthesiologists. *Regional Anesthesia and Pain Medicine*, 43(5): 456-466.