Ketamine for Pain

- **Scope/Restrictions:** ED
  - Patients must be 18 years of age or older

- **Dosing:** 0.3 mg/kg (up to a max dose of 40 mg) in 100 mL 0.9% sodium chloride administered IVPB over 20 minutes
  - No renal dose adjustments required
  - No repeat doses
  - To minimize risk of adverse effects, not to be given IV push

- **Potential indications, but not limited to:**
  - Abdominal pain
  - Back pain (non-radicular)
  - Burns
  - Refractory headache
  - Musculoskeletal pain
  - Neuropathic pain
  - Renal colic
  - Sickle cell crisis

- **Relative contraindications:**
  - Pregnancy, breast-feeding
  - Altered mental status
  - Systolic blood pressure >180 mm Hg
  - Pulse rate >150 beats/min
  - Medical history of acute head or eye injury, seizure, intracranial hypertension, alcohol or drug abuse, or psychiatric illness

- **RN Administration and Monitoring:**
  - Must be administered by secured infusion (lock box)
  - Pain and POSS sedation assessment prior to administration and 15 minutes post administration
  - Vitals (blood pressure, heart rate, respiratory rate and oxygen saturation) prior to administration, every 15 minutes until infusion complete, and 15 minutes after completion of infusion
  - Adverse effects (*less likely to occur with low dose ketamine*)
    - Hypertension, tachycardia, nausea, dizziness, dreamlike state/unreality
    - Increased secretions, somnolence, excitement, emergence reactions (hallucinations, vivid imagery, confusion)

- Per the American College of Emergency Physicians, low dose ketamine should be given under the same procedures and policies as other analgesic agents administered by the nursing staff in the ED setting.

**Additional Resources:**


**References:**


Ascension Wisconsin, February 2019