

Ketamine Low Dose Infusion for Analgesia

Effective **September 1, 2019**, the use of **Ketamine as a low dose infusion for analgesia** is approved.

Ketamine is a hypnotic/dissociative agent which can effectively be used for analgesia. Low dose infusions of ketamine are associated with pain relief and lower risk of adverse effects. Ketamine infusions have been proposed as an adjunctive agent for patients with higher opioid requirements or pain refractory to opioid therapy.

Refer to tables below for dosing:

Adult Dosing		
Route	Starting Dose	Repeat Dose or Continuous Infusion
IV Intermittent Infusion	0.3mg/kg* in 100mL NS Administer over 15 minutes	Repeat X 1 in 2 hours if needed (refer to pain scale) Max dose 0.5 mg/kg
Continuous Infusion	0.3mg/kg* in 100mL NS Administer over 15 minutes	500mg/500mL (24hr bag) Concentration: 1mg/mL Start at 0.1mg/kg/hr Titrate by 0.05 mg/kg/hr every 15 min to max of 0.5 mg/kg/hr to achieve pain relief (refer to pain scale) Treatment Duration: 48hr
Pediatric Dosing		
Route	Starting Dose	Repeat Dose or Continuous Infusion
IV Intermittent Infusion	0.3mg/kg* in 50mL NS Administer over 15 minutes	Repeat X 1 in 2 hours if needed (refer to pain scale) Max dose 0.5 mg/kg
Continuous Infusion	0.3mg/kg* in 50mL NS Administer over 15 minutes	100mg/100mL (24hr bag) Concentration: 1mg/mL Start at 0.1mg/kg/hr Titrate by 0.05 mg/kg/hr every 15 min to max of 0.5 mg/kg/hr to achieve pain relief (refer to pain scale) Treatment Duration: 48hr

* May use lower starting dose of 0.1-0.2mg/kg

Note: IV push and intranasal is to be administered by a credentialed physician or advanced practice provider ONLY.

Administration and Monitoring Guidelines

- All doses are compounded in the pharmacy and hand delivered to approved units (**only approved in critical care units, emergency department, PACU and day hospital pediatrics**)
- Ketamine is administered intravenously by infusion pump using guardrails safety software
- Monitor vital signs including heart rate, blood pressure, respiratory rate and oxygen saturation on all patients while on the continuous drip and after administration of intermittent doses
- Hold for RASS less than -1 and Resp. Rate less than 14 breaths/min
- Monitor for mental status changes including excessive sedation, psychotic or psychotomimetic symptoms, and tonic clonic movements

CONTACT PHARMACY IF YOU HAVE ANY QUESTIONS CONCERNING THIS PROCESS