**Ketamine Sedation Protocol for Emergency and Critical Care**

**Patient Weight:** __________ kg

### 1. Rapid dissociative dosing for the following indications:
- **Acute psychomotor agitation**
- **Procedural sedation**
- **Facilitate intubation**

- Ketamine (50 mg/mL vial) 1.5 mg/kg = _______ mg (round to nearest 50mg) slow IVP over 3-5 minutes; may repeat q 3 minutes until desired dissociation achieved. **FOR ADMINISTRATION BY PHYSICIAN ONLY**
- Ketamine (100 mg/mL vial for IM use) 4 mg/kg = _______ mg (round to nearest 50 mg) IM x 1; may repeat q 10 minutes until desired dissociation achieved. **FOR ADMINISTRATION BY PHYSICIAN ONLY FOR IM USE ONLY**

### 2. Sub-anesthetic infusion for the following indications:
- To facilitate analgo-sedative weaning and extubation in mechanically ventilated patients
- Use as an adjunct to multi-modal pain control in patients with opioid tolerance
- **NOTE:** May be used in patients that are not intubated

- Ketamine IV infusion (1000 mg in 250 mL NS); start at 0.1 mg/kg/hr. Titrate by 0.05 mg/kg/hr every 1 hour to attain goal RASS and CPOT. Maximum 0.4 mg/kg/hr.

- **Optional Nursing Order:** Wean analgesic and sedative drips by 25% every 12 hours while on ketamine infusion. Notify pharmacy if analgesic and sedative infusions have been successfully weaned off.

### 3. Full anesthetic/dissociative infusion for the following indications:
- To facilitate maintenance analgo-sedation in mechanically ventilated patients (ie. as an alternative to propofol/midazolam for patients with hypotension and/or bradycardia)
- **NOTE:** May be initiated ONLY in patients receiving mechanical ventilation

- Ketamine (50mg/mL vial)1.5 mg/kg = _______ mg (round to nearest 50mg) IVP x 1; then start infusion:
  Ketamine IV infusion (1000 mg in 250 mL NS); start at 0.75 mg/kg/hr. Titrate by 0.25 mg/kg/hr every 1 hour to attain goal RASS and CPOT. Maximum 3 mg/kg/hr.

- **Nursing Order:** Must be used with continuous ECG and pulse oximetry
- **Nursing Order:** Alert MD if patient develops new-onset SVT, an acute rise in HR exceeding 120 bpm, or SBP > 180 mmHg
- **Nursing Order:** Alert MD if patient develops excessive oral or airway secretions
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<th>Date &amp; Time</th>
<th><strong>Physician Practice Points:</strong></th>
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<tbody>
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<td>• Rapid IV administration of ketamine can cause brief periods of apnea. Administer by slow IVP in non-intubated patients.</td>
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<td>• Outside of rapid IV administration, ketamine has minimal effects on respiratory drive. Infusions may be used during spontaneous breathing trials and weaned after extubation.</td>
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<td>• Other opioids may be used in conjunction with ketamine – consider weaning other opioid infusions (ie. fentanyl) or using lower doses when ketamine started.</td>
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<td>• When weaning ketamine, consider low-dose benzodiazepine administration for emergence reactions and dysphoria (ie. midazolam 1mg IV q 5 minutes PRN agitation).</td>
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<td>• Consider an anti-sialogogue such as glycopyrrolate or a scopolamine patch in patients who develop excessive oral or airway secretions while on maintenance ketamine infusions.</td>
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Date: /  
Time:  
Physician Signature:  

DOCTOR’S ORDERS  

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