Patient with severe acute pain necessitating IV analgesia?

Apply Inclusion / Exclusion Criteria (See Tables #1 and #2)

Usual Care

No

Patient meets inclusion criteria?

Yes

Low Dose Ketamine IV 0.1 mg/Kg – 0.3 mg/Kg*

**Dosing / Administration**
- IV: 0.1 mg/Kg – 0.3 mg/Kg every 30 minutes for total dose 0.3 mg/Kg
- May repeat dose every 2 hours
- Administration: Slow IV push over 1 minute

**Monitoring**
- Continuous HR, SpO2 and Telemetry Monitoring
- Monitor up to 1 hour after last dose prior to disposition

**TABLE 1: INCLUDED PATIENT POPULATIONS**
- Musculoskeletal or soft tissue trauma/pain
- Chronic pain (current, history of, or chart documentation of)
- Opioid tolerance or dependence (current, history of, or chart documentation of)
- Sickle cell vaso-occlusive pain crisis
- Burns
- Neuropathic pain
- Physician discretion

**TABLE 2: EXCLUSIONS**
- Excluded Patient Populations
  - Pregnant or breastfeeding women
  - Known or suspected allergy to ketamine
  - Active chest pain, respiratory distress, or acute heart failure
  - Advanced liver disease or cirrhosis
  - Patients <18yo
  - Active psychosis or mental health disturbance, hallucinogenic state or toxic exposure
  - Patients enrolled in current or ongoing research study that precludes participation (e.g. Sickle Cell)

**Caution/Warnings**
- Ketamine should be used with caution in the following situations:
  - Severe systemic hypertension (>180/110) or uncontrolled tachycardia
  - Known or suspected traumatic brain injury
  - Known or suspected elevation in intracranial/intraocular pressure
  - Cardiac arrhythmia
  - Ischemic heart disease or heart failure
  - Elderly patients >75yo

**All Adverse Effects**
- Most to Least Commonly Reported:
  - Psychomimetic
    - Dizziness, Dysphoria, Agitation, Anxiety, Dream State, Hallucinations
  - Nausea and/or Abdominal Pain
  - Sedation / Somnolence
  - Sialorrhea
  - Tachycardia, Hypertension, Hypoxia (Transient)
Selected References


