**H26. Ketamine (Ketalar)**

**Class and Action:** Nonbarbiturate anesthetic, dissociative analgesic; blocks afferent transmissions associated with pain perception, produces short acting amnesia without muscular relaxation.

**Indications:** Sedation, pain control

**Contraindications:** Hypersensitivity, *CVA*, increased ICP, hypertension, cardiac decompensation, renal failure

**Side Effects:** Hypertension, reflexive tachycardia and hypertension, hypotension, bradycardia, laryngeal spasm, hypersalivation

**Drug Interactions:** Effects maybe potentiated when used in combination with opioids or benzodiazepines.

**Onset, Duration, and Routes:** Onset is within 30 seconds and a duration of 5-10 minutes (dose dependent). Routes of administration are IM, IV, or IO

**Adult Dose/Pediatric Dose:**
- Advanced Airway Sedation 1-2 mg/kg IV/IO, repeat as needed to achieve goal RIKER Score
- Ketamine Infusion - 0.5-3.0 mg/kg/hr, titrate as needed to achieve goal RIKER score
- **I4. Ketamine Infusion Chart**
  - Analgesic 0.3 mg/kg IV/IO - Max 25 mg, mix in 100 ml bag and infuse over 10 minutes
  - Agitation 4 mg/kg IM or 2 mg/kg
  - Medication Assisted Airway - 2 mg/kg IV/IO

**WDM EMS Protocols:**
- A1. Advanced Airway Analgesic/Sedation
- A2. Analgesic
- C3. Agitation
- E3. Medication Assisted Airway
- I4. Ketamine Infusion

**Special Considerations:**
- Very low side effects but can cause laryngeal spasm, use Larson's maneuver to correct. Can also cause hyper-salivation, correct with Atropine.
- Coach patient to prevent emergence reaction as well as give with a benzodiazapine.


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