**Subject:**   KETAMINE (KENTANEST, KETASET, KETALAR)

**MEDICAL PROGRAM DIRECTOR: ___signed copy on file_____(J. Horsley, MD)_____**

**EFFECTIVE DATE:    12-03-2015 (DOH APPROVED)_____**

**PHARMACOLOGY:**
Hypnotic Analgesic

**ACTION:**
Ketamine is a dissociative anesthetic agent, structurally similar to phencyclidine (PCP).  In addition, it stimulates many different receptors, including opiod and catecholamine receptors.  It provides analgesia in addition to the amnestic and sedative effects.  The sympathomimetic effects cause an increase in heart rate, blood pressure, and cardiac output.  It is a bronchodilator, and may be beneficial in patients with bronchospasm requiring intubation.

**INDICATIONS:**
- Induction agent for rapid sequence intubation (RSI)
- Sedative/analgesic adjuct in trauma patients
- Excited Delirium

**CONTRAINDICATIONS:**
- Known hypersensitivity to Ketamine

**PRECAUTIONS:**
- Increased blood pressure due to catecholamine release.  Ketamine should be avoided in patients requiring intubation who also have a markedly elevated blood pressure.
- Reemergence phenomenon.  As with any intubated patient, continued sedation must be provided.  Emergence phenomenon can be markedly reduced by the use of a benzodiazepine.
- Increased ICP has been a theoretical concern, however studies have not shown a significant increase in ICP with the use of ketamine and therefore it is felt to be an appropriate induction agent for patients with possible increased ICP, unless they have markedly elevated blood pressure.

**SIDE EFFECTS:**
- Reemergence phenomenon
- Myoclonic movements are possible and should not be confused for fasciculations due to a depolarizing neuromuscular blocking agent, seizure activity, or emergence from sedation.
- Possible enhanced secretions

**DOSAGE:**
> Pain management:  0.3 mg/kg
> Rapid Sequence Induction:  2 mg/kg
> Excited Delirium:  5 mg/kg (IM)

**PEDIATRIC DOSE:** Pain management:  0.3 mg/kg
Rapid Sequence Induction:  2 mg/kg

**ROUTE:** IV, IM, IO

ALS