Utilization of Ketamine for Hypotension Guideline

Indications: Sedation of hypotensive patient Trauma patient Severe agitation/combative Onset: 1-2 minutes, Duration 5-10min IV, 10-25 min IM Benefits: No significant respiratory depression Adult Dosing Peds Dosing IM dose for sedation 2-4 mg / kg IM Procedure(RSI): 0.5-2mg/kg IV IV dose: 1-2 mg/kg. (RSI dose) Repeat: 0.25-1mg/kg q15min prn Followed by 0.25 - 0.5 Intranasal: 5mg/kg MAD q5-10 min as needed **Adult Infusion Peds Infusion** 5-20mcg/kg/min infusion 10-15mcg/kg/min infusion for sedation for sedation Titrate for effect Titrate for effect

Reference: Micromedex 7/2016

Ketamine

Class: Dissociative Anesthetic

Action: Acts on the muscarinic receptors in the cortex and limbic systems altering how the CNS perceives pain by decreasing neurotransmitters that cause an excitatory response.

Indications: Chronic or acute pain, pain associated with hypotension, sickle cell crisis, pain not relieved with opioids, RSI, dangerous/combative patients

Onset: 1-2 min IV/IO, 3-4 min IM

Duration: 5-10 min IV/IO, 10-25 min IM

Dose:

IVP Pain Management

0.1-0.5 mg/kg IV/IO q 15 0.5-1.0 mg/kg IM/IN consider using small amounts of opioids or benzodiazepines in conjunction

Sedation/Dissociative

1-2mg/kg IV/IO 2-4mg/kg IM

Ketamine infusion

- Loading dose 0.2-0.3mg/kg IVP over 10 min, followed by 0.1-0.5 mg/kg/hr infusion.
- Combine ketamine with periodic doses of opioids or benzodiazepine or low dose infusion

Contraindications - Known allergy, hypertension, CVA, Increased intra-ocular pressure

Cautions:Increased ICP, CHF

Complications/Reactions: May increase BP and/or HR, N/V, nystagmus, increased ICP, increased intra-ocular pressure

Special info:

- May help maintain respiratory drive and BP while still providing pain relief and sedation
- Dilates bronchioles
- Re-emergence symptoms can be reduced with administration of benzos/opioids
- May work for patient with resistance to narcotic pain medications
- Copious secretions may be controlled with Atropine 0.5-1.0mg IV/IO

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