County of San Luis Obispo Public Health Department Midazolam (Versed®)

Division: Emergency Medical Services Agency Effective Date: 04/15/2017

MIDAZOLAM (Versed®)

Classification: Benzodiazepine

Actions:

- 1. Hypnotic, amnesiac, sedative, anticonvulsant
- 2. Potent but short-acting, 3-4 times more potent than diazepam
- 3. Has NO effect on pain

Indications:

- 1. Active, continuous seizure
- 2. Status epilepticus
- 3. Sedation prior to cardioversion
- 4. Acute behavior disorder (agitated patient danger to self or others)
- 5. Severe muscle spasms (base physician order only)

Contraindications (Relative):

- 1. History of hypersensitivity to benzodiazepines
- 2. Shock with depressed vital signs
- 3. ALOC of unknown etiology/polypharmacy ingestion
- 4. Narrow-angle glaucoma
- 5. Eclampsia (base physician order only)

Adverse Effects (Precautions, Side Effects and Notes):

Midazolam may cause respiratory depression and/or hypotension especially if administered rapidly. Monitor patient closely.

- 1. Common side effects include drowsiness, hypotension, respiratory depression and apnea. These are more likely to occur in the very young and the very elderly. Rarely, patients may experience paradoxical agitation.
- 2. Respiratory depression is more likely in patients who have taken other CNS depressant drugs such as opioids, alcohol, other benzodiazepines or barbiturates, or when given rapidly.
- 3. Midazolam is metabolized in the liver and excreted by the kidneys. **Doses** should be adjusted accordingly in patients with underlying hepatic or renal diseases or cardiac diseases with low flow states such as CHF.
- 4. GI effects include nausea, vomiting, hiccough/hiccup
- 5. Pain at injection site (IV/IM), intranasal irritation if given IN

Administration:

ADULT DOSE

- 1. Seizure:
 - 1-2 mg SLOW IV or
 - 5 mg IM or IN (2.5 mg each nostril)
 - May repeat once after 10 min

MIDAZOLAM (Versed®) - continued

- 2. Pre-cardioversion sedation:
 - 1-2 mg SLOW IV
 - 5 mg IN (intranasal) (split dose: 2.5 mg each nostril)
 - May repeat once after 10 minutes
- 3. Agitated patient sedation (danger to self or others):
 - 1-2 mg SLOW IV
 - 5 mg IM or IN (intranasal) (split dose: 2.5 mg in each nostril)
 - May repeat once after 10 minutes

***EKG, Pulse oximetry, and ETCO2 (when equipment is available) monitoring will be used at all times.

PEDIATRIC DOSE

- 1. Seizure/Agitated Patient Sedation:
 - 0.1 mg/kg SLOW IV
 - 0.1 mg/kg IM/IN not to exceed 5 mg
 - Total max dose 5 mg

(IN volume for pediatric patient up to 0.3ml per nostril)

- 2. Pre-cardioversion:
 - 0.1 mg/kg IN or SLOW IV.
 - Max 2mg

***EKG, Pulse oximetry, and ETCO2 (when equipment is available) monitoring will be used at all times.

Onset: 1.5 - 5 minutes IV

2 - 6 minutes IN 15 minutes IM

Duration: 2 - 6 hours for IV/IN/IM