University of Minnesota
Masonic Children's Hospital

Emergency Department Guideline
Intranasal (IN) Midazolam

Objective: To utilize IN midazolam for a.) Minimal sedation for the pediatric patient; b.) Initial seizure control in the pediatric patient without IV access.

Indication:

1. The stable pediatric patient, who requires minimal sedation for a brief medical procedure or imaging study.
2. The pediatric patient presenting with an active seizure, but with no IV access. Additional medications for longer-term seizure control may be required after IN midazolam.

Evaluation/Intervention:

1. Sedation: Initial triage evaluation, including weight in kg, vital signs, NPO status. Monitoring per Minimal sedation protocol, with oximetry. Recommend NPO for minimum of 1 hour prior to sedation.
    a. Use IV midazolam, 5mg/ml concentration, with Mucosal Administration Device (MAD) on syringe.
    b. Dosage: 0.4-0.5mg/kg, to maximum of 10mg (2ml)
    c. Divide dose evenly between nares, rapidly infuse through MAD to each side.
2. Seizure therapy: Initial triage evaluation, including vital signs, oximetry. Patient expeditiously moved to treatment room, with ongoing oximetry, cardiac monitoring. Attempts at IV access should not be delayed for IN midazolam administration.
    a. Use IV midazolam, 5mg/ml concentration, with Mucosal Administration Device (MAD) on syringe.
    b. Dosage: 0.2mg/kg, to maximum of 10mg (2ml)
    c. May repeat dosage if no seizure control noted after 2-3 minutes.
    d. Consider IV access for additional anti-epileptic medication administration.

Documentation:

1. Triage vital signs: Weight in kg, Rectal temperature, HR, RR, oximetry, capillary refill
2. Vital signs after IN midazolam dose(s)
3. Time of each intervention