INTRANASAL MIDAZOLAM PROTOCOL

Indications

1. Minor procedures in stable pediatric patients (>6 months old)
2. Seizure cessation in status epilepticus if patient presents with no IV (>1 month old)

Dosing

Minor procedures:

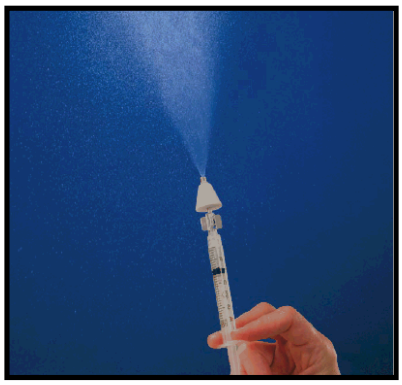
- Initial dose **0.2-0.5mg/kg** (maximum 10mg per dose)
- May repeat 0.2-0.5mg/kg at 10 minutes

Seizure cessation:

- Dose **0.2mg/kg** (maximum 10mg per dose)

Pharmacokinetics

Minor procedures: Onset 4-8mins, peak 12-15 mins
Time to seizure cessation: 3 mins



MED-RX nasal atomizer device

Contraindications/Precautions

Epistaxis or bilateral blocked nares
Known hypersensitivity to midazolam
Unstable hemodynamics or altered LOC

Administration

Consider 10mg lidocaine (1 spray endotracheal lidocaine) in each nare 1 min prior to midazolam to decrease burning sensation
Administer midazolam via MED-RX nasal atomizer with 1cc or 3cc syringe
Use high concentration IV formulation (5mg/mL) midazolam
Prime with 0.1cc (0.5mg) midazolam to account for atomizer 'dead space'
Apply to nare in one rapid push, aiming syringe toward lateral aspect nare
Split dose between nares if total volume >1cc

Monitoring (minor procedures)

Initial BP, O2 sat, HR, RR, no specific monitoring after administration
May discharge 30 mins post administration if patient alert and ambulatory

Sample dose calculation for 13kg patient

13kg x 0.3mg/kg = 3.9mg
3.9mg/(5mg/mL) = 0.78mL
0.78mL + 0.1mL to account for dead space = 0.88mL ≈ 0.9mL

Klein et al *Annals of Emergency Medicine* (2011) 58(4):323-9.
Chiaretti et al *Arch Child Dis* (2011) 96(2):160-3.
Fisgin et al *J Child Neurol* (2002) 17(2):123-6.
Lahat et al *BMJ* (2000) 321(7253):83-6.
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Battacharyya et al *Pediatr Neurol* (2006) 34(5):355-9.

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