

Intravenous Midazolam[®] for procedures

Facts

IV midazolam titrated and given as incremental boluses is a safe method of delivery, providing the risk factors are considered prior to administration and the child is **adequately monitored**.

Pharmacodynamics

- Anxiolytic – relieves anxiety/sedative/amnesic
- **No analgesic effect**

Duration of effect	Onset of action
Effect may last 30–60 minutes	1–5 minutes
	Incremental boluses to achieve 'anxiolytic effect' to safely execute the procedure*
* The desired effect is the relief of 'anxiety' rather than sedation	

Dose

Children > 6 months and under 12 months	Children >12 months, under 50kg	Child's weight over 50kg
0.1mg/kg of midazolam dilute to 10mls of 0.9% normal saline	0.1mg/kg of midazolam dilute to 10mls of 0.9% normal saline	5mg of midazolam dilute to 10mls of 0.9% normal saline
Bolus: Give 1ml and repeat bolus at intervals of no less than 5 minutes to achieve or maintain anxiolysis*	Bolus: Give 1–2mls and repeat bolus at intervals of no less than 3 minutes to achieve or maintain anxiolysis*	
Do not exceed total dose of 0.15mg/kg in 15mls of 0.9% normal saline	Do not exceed total dose of 0.15mg/kg in 15mls of 0.9% normal saline	Do not exceed total dose of 7.5mg in 15mls of 0.9% normal saline
* Monitor blood pressure 5 minutely, saturations and UMMS score		

Documentation

Utilise the Record of Sedation for Procedures (MR56S) for fasting/ observations/documentation requirements

Side effects

Rapid administration of IV midazolam increases the risk of cardiorespiratory depression.

Adverse effects

- Excessive sedation (UMSS score ≥ 2)
- Respiratory depression/apnoea
- Airway obstruction
- Hypotension, especially in patients with impaired cardiovascular stability
- Delirium/paradoxical agitation
- Hiccups
- Impaired coordination/balance. Patients are at risk for falls.

Precautions

Drug interactions, caution with drugs which cause sedation, respiratory depression or hypotension (e.g. opioids, benzodiazepines, antihistamines, antihypertensives)

- Cardiorespiratory instability e.g. altered depth and/or rate of respiration, apnoea, and low blood pressure
- Previous failure to sedate or paradoxical excitement with midazolam

Further information: Clinical Practice Guidelines 'Procedural Sedation' www.rch.org.au/comfortkids/professional.cfm?doc_id=10138

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For procedural sedation consultations contact: the Children's Pain Management Service/Comfort Kids or the In-Charge Anaesthetist