

# Paediatric Ketamine Guideline

ROYAL DEVON & EXETER EMERGENCY DEPARTMENT

Paediatric sedation may only be performed by accredited ED doctors

Patient label	Age (y/m): Consultant:	Wt (kg) = (age+4 x2):
Procedure being performed: SUTURING                      MANIPULATION                      REMOVAL OF FOREIGN BODY OTHER, please describe:		

### Stop! Think! Have you considered:

- Does the child simply need [analgesia](#) and reassurance?
- Distraction techniques (with a trained nurse or play therapist)?
- [Adrenaline cocaine gel](#) for wounds (contraindicated when near or involving mucous membranes)?
- Entonox/[Nitrous oxide mixer?](#)
- [Intranasal diamorphine](#) where the child is clearly in significant pain?
- Is there another ED middle grade or consultant covering the department whilst you sedate? If not consider admitting the child for a general anaesthetic.

<b>CONTRAINDICATIONS:</b>	
Age less than 12 months due to an increased risk of laryngospasm and airway complications. Children aged between 12 and 24 months should only receive ketamine sedation from expert staff (usually a consultant)	
<b>Eaten within the last 4 hours;</b> consider risk/benefit in non-fasted clinically urgent cases.	
Proposed procedure within the mouth or pharynx	
A high risk of laryngospasm (active respiratory infection, active asthma)	
Unstable or abnormal airway. Tracheal surgery or stenosis.	
Active respiratory disease	
Patients with severe psychological problems such as cognitive or motor delay or severe behavioural problems	
Significant cardiac disease (angina, heart failure, malignant hypertension)	
Significant head injury or reduced level or consciousness	
Intracranial hypertension with CSF obstruction	
Intra-ocular pathology (glaucoma, penetrating injury)	
Previous psychotic illness	
Uncontrolled epilepsy	
Hyperthyroidism or Thyroid medication	
Porphyria	
Prior adverse reaction to Ketamine	
Medical history	
Drug history	

<b>Procedure</b>	
<ul style="list-style-type: none"> <li>• Contraindications checked</li> <li>• Procedure and complications explained to parents (laryngospasm and need for intubation 0.02%, moderate/severe agitation 1-5%, vomiting 7%, airway problems 1-5%, nystagmus and purposeless movements normal)</li> <li>• Written or verbal consent obtained (tick): <input type="checkbox"/></li> <li>• <b>All anaesthesia will take place in Resus</b></li> <li>• A minimum of <b>3 people</b> (total) must be present while the sedation takes place:-</li> </ul>	
<b>Person 1 / Sedator:</b>	A consultant emergency physician or approved middle grade (with a duty consultant in the department). They may delegate to an appropriately trained nurse after 20 minutes if patient stable. Observes the patient and is responsible for maintaining the airway and monitoring
<b>Person 2 / Nurse:</b>	Ensures documentation of oxygen saturation, respiratory rate, heart rate and sedation score at 5-minute intervals
<b>Person 3 / Operator:</b>	Performs the procedure. Stops at any time if instructed to by sedator
<ul style="list-style-type: none"> <li>• <b>Ketamine</b> Use the <a href="#">Timeout Guideline</a> before starting</li> <li>• Encourage the child and parents to talk (dream) about happy topics. This helps minimise unpleasant emergency phenomena</li> <li>• <b>Onset: 1-2 mins                      Offset: 20-45 mins</b></li> </ul>	
<b>Dose:</b> 1mg/kg ketamine IV over <b>no less than 1 min</b> . Consider 2.5mg/kg IM ketamine where IV cannulation has not been achieved or is predictably difficult. • Repeated 0.5 mg/kg IV incremental ketamine doses may be given if inadequate sedation at 5 minutes or longer anaesthesia required. Consider 1 mg/kg as a supplemental dose via the IM route	

Date:
Time:

### Monitoring and equipment

Basic airway equipment (Guedel, bag-valve-mask, suction, oxygen etc.)  
Advanced airway equipment (tracheal tubes, catheter mount, ties, bougies, etc.)

