

First name:		Surname:	
Hospital No:	NHS No:	DOB:	
Consultant:		Ward:	Hosp:
<i>Use addressograph label</i>			

Patient weight:	kg
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It is mandatory to complete this section	
ALLERGY STATUS: Medicine / Substance	Reaction
Sign (NAME)	Date

Prescription sheet for ketamine use in critical care areas, theatres and the emergency departments.

Indications for use on ICU:

- Induction of anaesthesia as part of a RSI (Rapid Sequence Induction)
- Maintenance of sedation via IV infusion
- IV infusion in the treatment of acute severe asthma (unlicensed indication)
- Treatment of acute pain – as a bolus or given as an IV infusion (unlicensed indication)

Absolute contraindications:

- Acute Porphyria
- Allergy

Relative contraindications:

- Known ischaemic heart disease
- Uncontrolled hypertension
- Raised intraocular pressure
- Psychosis
- Raised intracranial pressure and cerebral tumour (primary or secondary)
- Previous history of ketamine abuse

Side effects:

- Nausea – treat with anti emetics, consider dexamethasone if failure to respond to two agents
- Hallucinations - Create a calm, dark space for emergence to reduce incidence and severity of hallucinations. If problematic consider covering with a benzodiazepine during emergence.
- Excessive salivation - If troublesome the rate of infusion should be halved and, if it remains troublesome, the infusion should be stopped
- Hypertension - Increase in blood pressure to 125% of the patient's baseline is an expected side effect of ketamine. If the blood pressure increases above 130% of the patient's baseline then halve the infusion rate and reassess.

Monitoring:

All patients receiving ketamine should have their heart rate, respiratory rate, blood pressure and oxygen saturations continuously monitored. A sedation score should be recorded if it is being used as an infusion for sedation.

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Treatment acute pain (unlicensed)

Recommended bolus for acute pain:

- 300 micrograms/kg

Infusion for acute pain:

For patients <70kg

Drug: Ketamine (4mg/ml)	Route: IV	Date:							
Dilution: 200mg diluted to 50mL with NaCl 0.9%	Start date:	Time:							
Rate: 1 – 3 ml/hr	Stop date:	Sign:							
Signature:	Pharm	Stop sign:	Witness:						

For patients >70kg

Drug: Ketamine (4mg/ml)	Route: IV	Date:							
Dilution: 200mg diluted to 50mL with NaCl 0.9%	Start date:	Time:							
Rate: 2 – 5 ml/ hr	Stop date:	Sign:							
Signature:	Pharm	Stop sign:	Witness:						

Induction of anaesthesia and maintenance of sedation

Recommended dose for induction of anaesthesia:

- 1-2mg/kg

Infusion for the maintenance of sedation:

Dose: 10-50mcg/kg/min = 0.6 – 3mg/kg/hour

Drug: Ketamine (10mg/ml)	Route: CVC	Date:												
Dilution: Undiluted	Start date:	Time:												
Rate: ml/ hr	Stop date:	Sign:												
Signature:	Pharm	Stop sign:	Witness:											
Maximum and minimum ketamine dose according to body weight	Body weight (kg)	45	50	55	60	65	70	75	80	85	90	95	100	
	Min infusion rate (mL/hr)	2.7	3.0	3.3	3.6	3.9	4.2	4.5	4.8	5.1	5.4	5.7	6.0	
	Max infusion rate (mL/hr)	13.5	15.0	16.5	18.0	19.5	21	22.5	24.0	25.5	27.0	28.5	30.0	

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Treatment of acute severe asthma

Bolus dose (optional)

- Dose: 0.5 – 1mg/kg over 2-4 minutes

Infusion for the treatment of acute severe asthma:

Dose: 0.5-2.5mg/kg/hr

Starting dose for infusion: 0.5mg/kg/hr

Drug: Ketamine (10mg/ml)	Route: CVC	Date:												
Dilution: See below	Start date:	Time:												
Rate: ml/ hr	Stop date:	Sign:												
Signature:	Pharm	Stop sign:	Witness:											
Maximum and minimum ketamine dose according to body weight	Body weight (kg)	45	50	55	60	65	70	75	80	85	90	95	100	
	Min infusion rate (mL/hr)	2.2	2.5	2.7	3.0	3.2	3.5	3.7	4.0	4.2	4.5	4.7	5.0	
	Max infusion rate (mL/hr)	11.2	12.5	13.7	15.0	16.2	17.5	18.7	20.0	21.2	22.5	23.7	25.0	

Treatment of Acute Severe Asthma- For Fluid restricted

Bolus dose (optional)

- Dose: 0.5 – 1mg/kg over 2-4 minutes

Infusion for the treatment of acute severe asthma:

- Dose: 0.5 - 2.5 mg/kg/hr
- Starting dose: 0.5mg/kg/hr

Drug: Ketamine (50mg/ml)	Route: CVC	Date:												
Dilution: See below	Start date:	Time:												
Rate: ml/ hr	Stop date:	Sign:												
Signature:	Pharm	Stop sign:	Witness:											
Maximum and minimum ketamine dose according to body weight	Body weight (kg)	45	50	55	60	65	70	75	80	85	90	95	100	
	Min infusion rate (mL/hr)	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.9	0.9	1.0	
	Max infusion rate (mL/hr)	2.2	2.5	2.7	3.0	3.2	3.5	3.7	4.0	4.2	4.5	4.7	5.0	

Dilution: Both 10mg/ml and 50mg/ml may be available. However if only a more concentrated solution is available the desired concentration can be made by diluting with Sodium chloride 0.9% or glucose 5%.