

PRESCRIPTION CHART

Intravenous Nurse/ Patient Controlled Analgesia

WARD

Pain Control Service

Great Ormond Street Hospital for Children

NHS Foundation Trust, Great Ormond Street, London, WC1N 3JH

IV NCA / PCA

Fentanyl +
Ketamine

SURNAME	FIRST NAME	HOSPITAL NUMBER	D.O.B.	AGE	WEIGHT
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ALLERGIES ?	SPECIAL INSTRUCTIONS
	<ul style="list-style-type: none"> Ensure protocol is printed on the back of this prescription Use in conjunction with Trust Clinical Practice Guidelines

FENTANYL (≤ 50 kg 25 micrograms/kg) (> 50 kg 1250 micrograms)		DATE																
DOSE microgram																		
MAXIMUM VOLUME in any 4 hour period excluding Loading Dose or Extra Bolus 20 ml		HR																
+ KETAMINE (≤ 50 kg 1 or 2 mg/kg) (> 50 kg 50 or 100 mg)		MIN																
DOSE mg																		
made up to 50 ml with 0.9% sodium chloride or 5% glucose																		
Tick which solution to be used <input type="checkbox"/> <input type="checkbox"/>																		
PCA BACKGROUND 0 – 0.2 ml/hr BOLUS 0.5 – 2 ml LOCKOUT 5 – 10 min	DOSE RANGE	ROUTE IV	• EXTRA BOLUS DOSE															
NCA BACKGROUND 0 – 1 ml/hr BOLUS 0.5 – 1 ml LOCKOUT 20 – 30 min LOCKOUT ICU 5 minutes ONLY	DOSE RANGE		• LOAD DOSE															
LOADING DOSE OR EXTRA BOLUS Fentanyl: 0.25 – 1 microgram/kg (0.5-2ml) MAX DOSE: 1 microgram/kg to max of 50 microgram		•SYRINGE CHANGE																
START DATE	SIGNATURE	BLEEP 0577	SIGN															
PHARMACY USE																		

AS REQUIRED DRUGS

NALOXONE For respiratory depression				DATE														
DOSE	other	ROUTE	Additional Instructions 4 micrograms/kg (Max 200 mcg) RESP RATE < breaths/min	HR														
PRN		IV		MIN														
micrograms		FREQUENCY STAT		DOSE GIVEN														
START DATE	SIGNATURE	BLEEP 0577		ROUTE														
PHARMACY USE				SIGN														

Protocol overleaf

Protocol for the use of Fentanyl + Ketamine Intravenous PCA / NCA

Use in conjunction with Pain Management Chart and Clinical Practice Guidelines

Special precautions

- Fentanyl is an alternative opioid, which may be used for patients who have a contra-indication to morphine or as part of an opioid rotation plan.
- Ketamine should only be prescribed after discussing the patient with an Anaesthetist or the Pain Control Service.

General instructions

- No supplementary opioids unless ordered by the Anaesthetist or Pain Control Service
- Line for IV opioids should be exclusive or an anti-reflux valve must be used
- An anti-syphon line must be used
- Record observations according to Clinical Practice Guidelines (at least hourly)
- Assess for pain and potential opioid related side-effects hourly while on NCA/PCA, and for 6 hours after cessation
- Multi-modal / synergistic analgesia – ensure it is prescribed and administered
- Treatment of side-effects:
 - Nausea & vomiting: Give antiemetics as prescribed
 - Itching: Antihistamine as prescribed
 - Over sedation: See Sedation Scale
 - Respiratory depression: Assess child and if respiratory depression is suspected:
 1. Stop infusion
 2. Give Naloxone as prescribed
 3. Call Pain Control Service
 4. Document actions in the child's records

The Pain Control Service can be contacted on Bleep 0577 at any time (24 hours)
Intravenous

weight	drug and dose			concentration	
up to 50 kg	Fentanyl 25 microgram/kg			1 ml = 0.5 microgram/kg	
	AND	made up to 50 ml with 0.9% sodium chloride or 5% glucose		(Max 4 hrly dose: 20 mls)	
	Ketamine 1 or 2 mg/kg			1 ml = 20 or 40 microgram/kg	
SUGGESTED INITIAL PROGRAM		Loading dose (ml)	Background inf (ml/hr)	Bolus dose (ml)	Lockout (mins)
PCA	standard	0.5 to 2	0 or 0.2	0.5 or 1	5 or 10
NCA	standard	0.5 to 2	0, 0.2, 0.5 or 1	0.5 or 1	20 or 30
NCA	in ICU areas	0.5 to 2	0, 0.2, 0.5 or 1	0.5 or 1	5
NCA	neonates & infants < 5 kg	0.5 to 2	0	0.5	20

weight	drug and dose			concentration	
over 50 kg	Fentanyl 1250 microgram			1 ml = 25 microgram	
	AND	made up to 50 ml with 0.9% sodium chloride or 5% glucose		(Max 4 hrly dose: 20 mls)	
	Ketamine 50 or 100 mg			1 ml = 1 or 2 mg	
SUGGESTED INITIAL PROGRAM		Loading dose (ml)	Background inf (ml/hr)	Bolus dose (ml)	Lockout (mins)
PCA	standard	0.5 to 2	0 or 0.2	1 or 2	5 or 10
NCA	standard	0.5 to 2	0, 0.2, 0.5 or 1	1	20 or 30
NCA	in ICU areas	0.5 to 2	0. 0.2. 0.5 or 1	1	5