

# PRESCRIPTION CHART

## Subcutaneous Nurse/Patient Controlled Analgesia

WARD

Pain Control Service  
Great Ormond Street Hospital for Children  
NHS Trust, Great Ormond Street, London, WC1N 3JH

SC 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"> <li>For pump programming protocols, refer to Pain Management Chart</li> <li>Use in conjunction with Trust Clinical Practice Guidelines</li> </ul>

<b>FENTANYL</b> (≤ 50 kg 25 micrograms/kg) (> 50 kg 1250 micrograms) <b>DOSE</b> microgram		DATE															
<b>MAXIMUM VOLUME</b> in any 4 hour period excluding Loading Dose or Extra Bolus 8 ml		HR															
<b>+ KETAMINE</b> (≤ 50 kg 1 or 2 mg/kg) (> 50 kg 50 or 100 mg) <b>DOSE</b> mg made up to 20ml with 0.9% sodium chloride		MIN															
<b>PCA</b> BACKGROUND 0 – 0.1ml/hr BOLUS 0.2 – 0.4 ml LOCKOUT 5 – 10 min	<b>DOSE RANGE</b> 0 – 0.1ml/hr 0.2 – 0.4 ml 5 – 10 min	ROUTE SC	• EXTRA BOLUS														
<b>NCA</b> BACKGROUND 0 – 0.4 ml/hr BOLUS 0.2 – 0.4 ml LOCKOUT 20 – 30 min LOCKOUT ICU 5 minutes ONLY	<b>DOSE RANGE</b> 0 – 0.4 ml/hr 0.2 – 0.4 ml 20 – 30 min 5 minutes		• LOAD DOSE														
<b>LOADING DOSE or EXTRA BOLUS</b> Fentanyl ≤ 50kg: 0.25 – 1 microgram/kg (0.2–0.8ml) ACCORDING TO PROTOCOL MAX DOSE >50kg: 50 micrograms (0.8ml)			• SYRINGE CHANGE														
START DATE	SIGNATURE	BLEEP 0577	SIGN														
PHARMACY USE																	

### AS REQUIRED DRUGS

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

### Protocol overleaf

*Use in conjunction with the 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.
- Ketamine should only be prescribed after discussing the patient with a consultant anaesthetist or the Pain Control Service.

## General instructions

- **No supplementary opioids unless ordered by the Anaesthetist or Pain Service**
- Line for SC opioids should be exclusive or an anti-reflux valve must be used
- Record observations according to Clinical Practice Guidelines
- **Assess pain HOURLY** while on NCA/PCA, continue for 6 hours after cessation
- **Multi-modal / synergistic analgesia** – ensure it is prescribed and use it
- Treatment of side-effects:
  - Nausea & vomiting:** Give antiemetics as prescribed
  - Itching:** Chlorphenamine as prescribed
  - Over sedation:** See Sedation Scale
  - Respiratory depression:** Resp rate: If less than shown on drug chart:
    1. Give oxygen
    2. Stop infusion
    3. Give naloxone 4 microgram/kg IV
    4. Call Pain Service

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

## Subcutaneous

Weight		Drug	solution	Concentration	
<b>up to 50 kg</b>		Fentanyl 25 micrograms/kg AND Ketamine 1 or 2 mg/kg	made up to 20 ml with 0.9% sodium chloride	1 ml = 1.25 microgram/kg (Max 4 hrly dose: 8 mls)	1 ml = 50 or 100 microgram/kg (Max 4 hrly dose: 8 mls)
SUGGESTED INITIAL PROGRAMMING		Loading dose (ml)	Background inf (ml/hr)	Bolus dose (ml)	Lockout (mins)
PCA	standard	1 or 2	0 or 0.1	0.2 or 0.4	5 or 10
NCA	standard	1 or 2	0, 0.1, 0.2 or 0.4	0.2 or 0.4	20 or 30
NCA	in ICU areas	1 or 2	0, 0.1, 0.2 or 0.4	0.2 or 0.4	5
NCA	neonates & infants < 5 kg	0.4, 1 or 2	0	0.2	20
Weight		Drug	solution	Concentration	
<b>over 50 kg</b>		Fentanyl 1250 microgram AND Ketamine 50 or 100 mg	made up to 20 ml with 0.9% sodium chloride	1 ml = 62.5 micrograms (Max 4 hrly dose: 8 mls)	1 ml = 2.5 or 5 mg (Max 4 hrly dose: 8 mls)
SUGGESTED INITIAL PROGRAMMING		Loading dose (ml)	Background inf (ml/hr)	Bolus dose (ml)	Lockout (mins)
PCA	standard	1 or 2	0 or 0.1	0.4 or 0.8	5 or 10
NCA	standard	1 or 2	0, 0.1, 0.2 or 0.4	0.4 or 0.8	20 or 30
NCA	in ICU areas	1 or 2	0, 0.1, 0.2 or 0.4	0.4 or 0.8	5