Acute Pain Service



Fentanyl PCA Guidelines via Fresenius Kabi Agilia PCA syringe pump

Fentanyl is a potent opioid that can be used as an alternative to morphine.

Indications for use

- Patients with renal impairment.
- Patients with hepatic impairment.
- True allergy to morphine (rare).
- Severe Morphine intolerance: uncontrolled nausea, dysphoria or severe pruritus.

Presentation

- Glass vials, solution concentration 50 micrograms Fentanyl per ml.
- 500mcgs Fentanyl in 10 ml.

Preparation

Add Fentanyl 1,000 micrograms (Two x 10 ml large vials: total 20 mls of 50mcgs/ml) to 30mls Sodium chloride 0.9% drawn up into a 50ml luer lock syringe to make a total volume of 50ml.

- 1,000 micrograms divided by 50mls.
- Final concentration 20 micrograms/ml.
- Check and Label syringe as per NHSL policy, (24hour expiry).
- Check prescription on HEPMA and PCA prescription chart.
- Program Fresenius Kabi Agilia PCA syringe pump; only if you have completed specific pump training program.
- On programming pump ensure you select the correct make of syringe. The pump default is BD Plastipak which is our current stock luer lock 50ml syringe.
- Prime PCA extension set (requires anti siphon and anti reflux valve) currently Alaris Extension Set (Ref 30852).
- Review program against prescription chart and syringe with colleague and sign on checking together. Lock pump cover.

Reviewed May 2025 | For next review June 2027 TGD.FENPCA.22_13779.W

Standard Prescription Fentanyl PCA Regime

20 microgram bolus = 1ml 5 minute lockout

(20 micrograms of Fentanyl is approximately equivalent to 1mg of morphine)

Changing PCA Syringe

- Can only be changed by staff trained to do so.
- ❖ PCA syringes should be changed every 24 hours if prescription to continue.
- PCA giving sets can be in situ for up to 72 hours and then require renewal if prescription to continue.

Discontinuing the PCA

- Two nurses must verify and destroy all remaining drug, emptying the syringe into a sharps bin details should be recorded on PCA chart.
- Oral analgesia must be prescribed and administered prior to removal of the device.

No background infusion usually, except on prescription by an anaesthetist. Any background infusion requires level one monitored bed. Requires same 2 hourly observation management as Morphine PCA.

Notify Acute Pain Service of patient for review or on call Anaesthetist out of hours dect 8657.