

Subcutaneous Fentanyl and Alfentanil in Palliative Care St Peter's Hospice: Information for Primary Care



- Fentanyl and alfentanil are strong opioids which can be given as subcutaneous (SC) injections or in a syringe pump mixed with other commonly used SC drugs (some reports of incompatibility in syringe pump with cyclizine for both fentanyl and alfentanil).
- They may be authorised in specific circumstances for patients who are in last weeks or days of life in line with anticipatory prescribing guidelines or in those where injections or syringe pump are needed for symptom control. **Advice from a Hospice or Specialist Palliative Care professional is recommended.**
- They do not accumulate in patients with renal failure and may be appropriate in some circumstances if eGFR <30ml/minute.

Indication and uses

1. eGFR <30 ml/minute

- Consider fentanyl/alfentanil if SC opioid is needed and clinically relevant risk of side effects if another opioid is used (e.g. longer prognosis, high analgesic requirements).
- There are risks in using an opioid which is less familiar to health professionals and not widely available so a pragmatic decision should be made weighing up risks and benefits.
- Always use fentanyl or alfentanil for patients stopping dialysis.
- May not be necessary for patient at the very end of life with an EGFR in the 20s requiring only low doses of opioid. In this scenario if patient is opioid naïve consider using oxycodone SC as anecdotally less risk of side effects than other opioids.

Last weeks of life: Oxycodone 1-2mg SC PRN 1 hourly for pain/breathlessness.

Approaching last days: Oxycodone 2.5-7.5mg/24 hrs via pump-start when needed.

- If a pragmatic decision is made to use SC morphine or oxycodone in a patient with eGFR<30ml/minute monitor for side effects or toxicity and change to SC alfentanil or fentanyl if these develop.

2. Opioid toxicity

- Use with specialist advice in a patient with eGFR>30ml/minute who needs a SC opioid but can not tolerate other opioids.

Approximate dose conversions

Patient on drug A PO=oral SC=subcutaneous	Divide the 24 hour dose (mg) of A by:	To convert to the 24 hour dose (mg) of drug B	Example	
			A	B
PO morphine	150	SC fentanyl	15mg	100 micrograms
PO morphine	30	SC alfentanil	15mg	500 micrograms

Practicalities of using SC fentanyl/alfentanil

- All concentrations listed below are available in enhanced service [pharmacies](#).
- Fentanyl:** For an opioid naïve patient stopping dialysis or where fentanyl is indicated prescribe and authorise the following on the community palliative care drug chart:
Last weeks of life: 12.5-25 micrograms SC PRN 1 hourly.
Approaching last days: Syringe pump: 50-150micrograms/24 hours start when needed.
- As fentanyl amps are 100microgram/2ml, maximum SC injection is 100 micrograms and maximum dose in pump is ~600-900 micrograms depending on syringe size and other drugs in the pump. If volume prohibits use in pump, change to alfentanil (seek specialist advice).
- Alfentanil: Caution:** There are 2 different concentrations: 500micrograms/ml and 5mg/ml
- Avoid having both concentrations of alfentanil in use for one patient**
E.g. if changing to 5mg/ml alfentanil for the PRN doses due to volume also use 5mg/ml for the syringe pump and ensure lower concentration amps are returned to pharmacy
- Note alfentanil injection is short acting lasting only ~ 1hr so is not ideal for prn use. An alternative PRN opioid e.g. oxycodone may be required. (Seek specialist advice)