

## Supportive Care

### End of Life Phase

Guidelines for Health Care Professionals  
In the care of patients with established renal  
failure who are in the last days of life

References:

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Brown E; Chambers E J; Egling C; (2007) *End of Life Care in Nephrology*. Oxford University Press

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## **End of Life Phase – Guidelines for Health Care Professionals on the care of patients with established renal failure who are in the last days of life**

**The aim of treatment is the comfort of the patient and the support of those close to them**

Use these guidelines when the whole team, the patient and family agree that the patient is in the last days of his or her life

It is a guide to treatment and practitioners should exercise their own professional judgement according to the clinical situation

It is helpful to have considered the following questions:

- Do the patient, family and healthcare professionals recognise that the end of life is approaching?
- Has the preferred place of care been discussed with patient and family and their wishes recorded?
- Have the patient and family been asked about their cultural, spiritual and religious needs at this time?
- Have all unnecessary investigations, including blood tests and routine monitoring e.g. BP, been discontinued?
- Have all non-palliative medications been discontinued
- Is comfort care, particularly care of mouth and skin, in place?
- **Are the drugs needed for palliation prescribed by route appropriate for the patient's situation and are they available as needed?**

If uncertain, please contact senior medical, nursing or pharmacy staff on your team or your local palliative care service  
Syringe driver guidelines are available on the Trust website

# Pain Control

For good symptom control prn medication should be prescribed for likely symptoms even when the patient is asymptomatic. All of the drugs listed below should be given subcutaneously, unless otherwise specified.

## PAIN

- All patients should have a strong opioid prescribed, to be available as needed (prn)
- Recommendation: Fentanyl 12.5 – 25 micrograms s/c prn up to hourly

### 1) Patient in pain: opioid naïve

#### (a) Pain intermittent

- see also box for adjuvant drugs
- prescribe fentanyl 12.5 or 25 micrograms s/c as needed up to hourly
- after 24hrs or sooner, review medication, if two or more prn doses needed or
- if patient still in pain, set up subcutaneous (s/c) syringe driver to run over 24hrs
- starting dose usually fentanyl 100 – 250micrograms/24hr
- 25micrograms of fentanyl s/c is approximately  $\cong$  2mg s/c morphine or 1.5mg s/c diamorphine

#### (b) Pain continuous

- give stat dose s/c fentanyl then start continuous s/c infusion in syringe driver with fentanyl
- starting dose depends on frailty & severity of pain; 100 – 250micrograms/24hr fentanyl
- prescribe prn medication, s/c fentanyl 1/10<sup>th</sup> of the 24hr dose, which can be given hourly
- increase or decrease dose in syringe driver depending on response or side effects

### 2) Patient in pain: already on strong opioid (see box if patient already on a fentanyl patch)

- If on other strong opioid you need to convert to dose equivalent of fentanyl; or alfentanil
- If > 600 micrograms fentanyl/24hours required see supporting information and contact palliative care

#### (a) Opioid responsive pain:

- increase present dose by 25 - 30% or
- add up previous day's prn doses and add to the regular dose (do not include doses used for specific movement related pain eg dressing change or washing)
- **plus prn medication, s/c fentanyl dose 12.5 –25micrograms hourly – see above**

#### (b) Opioid poorly responsive

- consider adjuvant; see box or contact local palliative care services

The patient has a **fentanyl patch**

- If the pain is controlled **continue** with the patch
- If pain is not controlled **continue with patch** and titrate additional analgesia with prn or continuous s/c fentanyl or alfentanil

### Adjuvant drugs for specific indications

- **bowel colic** – consider hyoscine butylbromide (Buscopan) 20mg s/c stat and up to 240 mg / 24 hours
- **joint stiffness, pressure sores** – consider oral or rectal paracetamol or NSAID
- **neuropathic pain** – consider clonazepam 500micrograms sc prn or nocte, can be given 12 hourly
- **associated anxiety & distress** – midazolam 2.5mg S/C hourly  
A combination of midazolam and fentanyl or alfentanil can be very effective in agitated patients who are in pain.

## Supporting Information for Pain Control and other Symptom Management

- Fentanyl and alfentanil are suggested as alternative strong opioids to morphine for patients in renal failure as they have no active metabolites with the potential to cause symptomatic and distressing toxicity such as myoclonic jerks, agitation and hallucinations
- **In the opioid naive patient successful pain relief can be achieved with low doses e.g. 100 – 200 mcg/ fentanyl/24 hrs without excess sedation;** subcut fentanyl is about 75 times as potent as subcut morphine so:-
  - 200 micrograms s/c Fentanyl /24 hrs is **approximately** equivalent to 30 mg oral or 15 mg s/c morphine /24 hrs & 4 mg oral hydromorphone/24 hrs
- Alfentanil is 1/4 - 1/5 as potent as fentanyl, and 10 times as potent as subcut diamorphine or 15 times as potent as subcut morphine. Use when doses of fentanyl exceed 600micrograms/24hrs as fentanyl less soluble and the volume too great for the syringe driver
- We do not usually recommend alfentanil for dose titration as it has a very short duration of action 30-60 minutes. It is useful for painful procedures however, the suggested dose for patient on s/c alfentanil would be approx 1/10<sup>th</sup> the 24 hour dose
- Fentanyl and alfentanil can be mixed with all the common drugs in a syringe driver, though care should be taken with alfentanil and cyclizine as it may crystallise
- Clonazepam can be given subcutaneously and may provide a useful adjuvant for neuropathic pain. As there is increased sensitivity to benzodiazepines in ESRD, titrate carefully against toxicity, starting with 500 micrograms/24hours to a maximum of 2 mg/24hours
- NSAIDS may worsen renal function, however for patients in the last days of life this may not be relevant and comfort is paramount
- Tramadol is preferred to codeine for step 2 analgesia as there can be idiosyncratic occurrence of respiratory depression with codeine. **Max 24 hour tramadol dose 100 mg.** Dextropropoxyphene and dihydrocodeine should be avoided
- All strong opioids should be monitored carefully, recognising that pain and the patient's clinical condition often changes rapidly
- If the patient develops Cheyne Stokes respiration it is usually a terminal event and the patient is often unconscious; it is important to explain this and reassure the relatives that we do not believe the patient is suffering at this time

## **For the symptoms below all patients should have prn medication prescribed and available**

At this stage the goal is relief of symptoms and the cause of the symptom may not be relevant

### **RETAINED RESPIRATORY TRACT SECRETIONS**

Symptoms absent: Hyoscine butylbromide 20 mg s/c 2 hourly prn

Symptoms present: Hyoscine butyl bromide 40 – 120 mg/24 hours s/c via syringe driver (SD) + 20 mg 2 hourly prn up to 240 mg / 24 hours

### **TERMINAL RESTLESSNESS AND AGITATION**

Symptom absent: Midazolam 2.5 mg s/c up to hourly prn. NB may be cumulative effect

Symptom present: Midazolam 2.5 mg s/c up to hourly prn. If two or more doses required, consider syringe driver with 10 – 20 mg/24 hours + prn dose

### **NAUSEA AND VOMITING**

#### **Symptoms absent:**

- 1) If already taking effective anti-emetic e.g. metoclopramide, cyclizine, haloperidol or levomepromazine it can be given in a syringe driver over 24hrs
- 2) If not taking an anti-emetic: prescribe levomepromazine 5mg s/c prn 8 hourly

#### **Symptoms present:**

Start levomepromazine 5 mg s/c prn up to 8 hourly or start 5-10 mg / 24 hours by continuous s/c infusion, with further 2 doses of 5 mg s/c /24hrs prn

### **SHORTNESS OF BREATH** - The following **may** be helpful whatever the cause

- Positioning the patient - a cool fan on the face - oxygen, if hypoxic and the reassuring presence of family or staff
- Strong opioids such as fentanyl, used at half to the full recommended dose for pain; used prn up to hourly or in SD if repeated doses needed
- Benzodiazepines, such as midazolam 2.5 mg s/c can be given up to hourly if associated with anxiety or panic attacks

**FLUID OVERLOAD** – is less common than might be expected but very distressing if it occurs. Use above guidance for shortness of breath or consider

- Sub lingual nitrates
- **If appropriate** consider: high dose furosemide or ultra filtration for comfort

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