

Somerset guidance on anticipatory prescribing in renal failure at end of life

Guidance

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Other related documents:

Somerset Alfentanil Shared Care Protocol
Somerset 'Just In Case' Medication Protocol

1.0 INTRODUCTION

1.1 Background

The purpose of this guidance is to ensure consistent practice across Somerset for opioid prescribing in renal failure, acknowledging potential variations in neighbouring counties. While many organisations outside Somerset, recommend fentanyl when eGFR <30 ml/min/1.73 m², other areas use alfentanil or reduced-dose oxycodone as a renal-friendly alternative to morphine.

Somerset guidance recommends continuing the usual opioid if symptoms are well controlled and there are no signs of opioid toxicity. However, in opioid-naïve patients, consideration of oxycodone for PRN use with alfentanil in a syringe driver is advised. The short acting nature of alfentanil supports the ongoing use of oxycodone as a PRN opioid, even when alfentanil is administered via a syringe pump.

There is no evidence suggesting fentanyl is safer than alfentanil in renal failure, making alfentanil the preferred opioid in Somerset's syringe driver protocol.

1.2 General principles

- While theoretical advantages exist for using alfentanil and fentanyl in patients with renal impairment, pragmatic clinical experience favours the cautious use of more familiar opioids, such as oxycodone and, if pain requirements remain stable, fentanyl transdermal patches.
- In the event an opioid is necessary, it is recommended to initiate treatment at lower doses than usual, titrate more cautiously and slowly, and closely monitor for opioid toxicity.
- Alfentanil is considered more appropriate when eGFR is less than 10 ml/min/1.73 m² or if the patient is discontinuing dialysis, as other opioids are more likely to induce toxicity in these circumstances.
- An [Alfentanil Shared Care Protocol](#) is available for the use of alfentanil in the community setting when initiated by and used with Specialist Palliative Care advice.

2.0 ANTICIPATORY PRESCRIBING IN RENAL FAILURE

Symptom	Medication	Notes
Pain / breathlessness	<p>with eGFR between <30 and >10 ml/min/1.73 m²: see flow chart in section 3.0</p> <p>eGFR <10 ml/min/1.73 m² or patient is discontinuing dialysis:</p> <p>a lower threshold for using alfentanil is recommended due to an increased risk of opioid toxicity. This should be discussed with the palliative care specialist.</p>	<p>For breathlessness & concurrent anxiety combine chosen opioid with midazolam 2.5mg SC 2-4 hourly PRN</p> <p>Alfentanil SC 1mg/24hr in syringe driver is equivalent to 30mg morphine oral/24hr</p>
Nausea and vomiting	<p>1st line: Levomepromazine 2.5-3.125mg SC 4hourly PRN may be sufficient to avoid sedating or hypotensive effects</p> <p>Or</p> <p>2nd line: Haloperidol 0.5-1mg SC 8hourly PRN</p>	<p>If syringe driver required:</p> <p>Levomepromazine 6.25-12.5mg SC over 24hr, increase the dose if required (max dose 25mg/24hr) – higher doses are usually sedating</p> <p>Or</p> <p>Haloperidol 1.5-3mg SC over 24hrs (may accumulate in severe renal impairment)</p>
Respiratory Tract Secretions	<p>Hyoscine Butylbromide (Buscopan[®]) 20mg SC 4 hourly PRN</p>	<p>If syringe driver required:</p> <p>Hyoscine Butylbromide (Buscopan[®]) 60-120mg SC over 24hr</p> <p>(No dose changes required in renal impairment)</p>

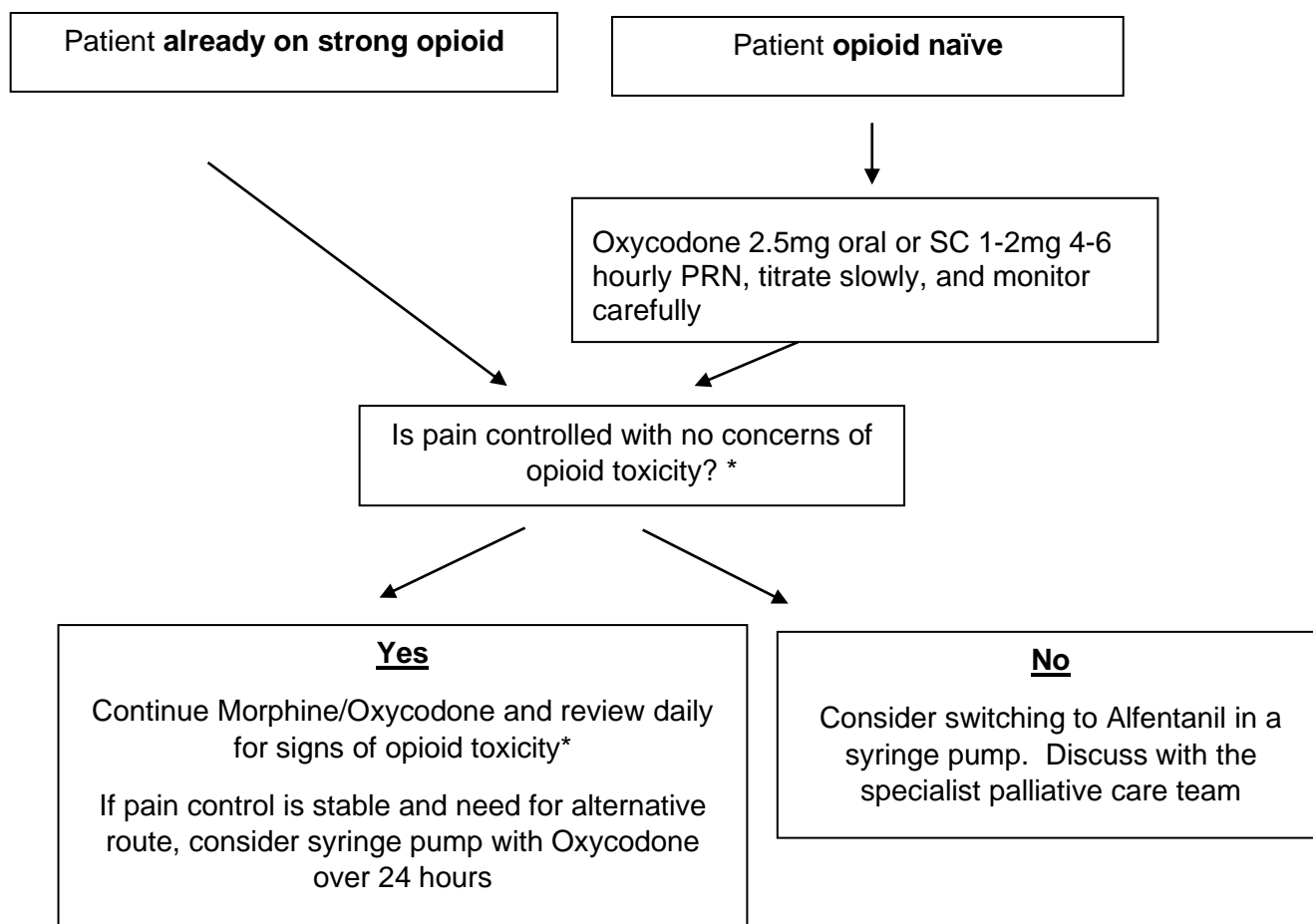
Agitation & restlessness	<p>1st line: Midazolam 2.5mg SC 2-4hourly PRN</p> <p>Or</p> <p>2nd line: Levomepromazine 6.25-12.5mg SC PRN 2-4hourly up to 50mg/24hrs</p>	<p>If syringe driver required: Midazolam 10-20mg SC over 24hr</p> <p>Titrate according to need</p> <p>Or</p> <p>Levomepromazine 25-50mg SC over 24 hr</p> <p>Titrate according to need</p>
Myoclonus/cramps	<p>Midazolam 2.5mg SC stat PRN then via syringe driver:</p> <p>Or</p> <p>Clonazepam 0.5mg PO at night</p>	<p>Midazolam 5-10mg SC over 24hr (can be increased to 20mg/24hr)</p> <p>There may be potential for increased susceptibility to myoclonus and cramps in patients with renal impairment.</p>

Review medication after 24 hours - consider a syringe driver over 24 hours if more than 2 doses have been administered or if there is inadequate symptom control.

- Contact the specialist palliative care team for further advice and guidance.

St Margaret's Hospice 24-hour support available on Tel: 01823 333822

3.0 MANAGEMENT OF PAIN / BREATHLESSNESS FOR PATIENTS WITH eGFR <30 ml/min/1.73 m² BUT >10 ml/min/1.73 m²



- A reduced dose of morphine or oxycodone will last longer due to slower renal excretion.
- If a syringe pump is required, and neither morphine nor oxycodone is tolerated, or if eGFR <10 ml/min/1.73 m², or patient is stopping dialysis, use alfentanil (alfentanil SC 1mg/24hr = 30mg morphine oral/24hr). This should be discussed with the specialist palliative care team.
- When alfentanil is used in a syringe pump, oxycodone is the most appropriate PRN opioid (see above) rather than use of alfentanil. The PRN dose should represent 1/10th of total 24-hour background dose and be administered every 4-6 hours.

*Signs of opioid toxicity include:

- Myoclonic jerks
- Hallucinations
- Agitation
- Drowsiness
- Reduced respiratory rate - NB A respiratory rate of less than 8 or oxygen saturation below 85% should prompt medical review and may indicate the need for naloxone (please discuss with the palliative care team).

4.0 REFERENCES

1. [Scottish Palliative Care Guidelines - Renal Disease in the Last Days of Life](#)
2. [St Luke's Hospice Plymouth - Guidance on the use of opioids in renal impairment in palliative care](#)
3. [Alfentanil 500 micrograms/ml solution for injection - Summary of Product Characteristics \(SmPC\) - \(emc\) \(medicines.org.uk\)](#)
4. [The Renal Drug Handbook 5th Edition](#)
5. Palliative Care Formulary 8th Edition (PCF8)
6. [King, S., Forbes, K., Hanks, G.W., Ferro, C.J. and Chambers, E.J., 2011. A systematic review of the use of opioid medication for those with moderate to severe cancer pain and renal impairment: a European Palliative Care Research Collaborative opioid guidelines project. *Palliative medicine*, 25\(5\), pp.525-552.](#)
7. Drug prescribing in renal failure: dosing guidelines for adults and children - 5th Edition, Aronoff et al
8. [British Association for the Study of the Liver Symptom control and end of life care in adults with advanced liver disease guideline](#)
9. [16.2 Pain control in palliative care - North & East \(devonformularyguidance.nhs.uk\)](#)
10. [Clinical Guidelines - St Peter's Hospice \(stpetershospice.org\)](#)
11. Subcutaneous Fentanyl and Alfentanil in Palliative Care: Information for Primary Care (St Peter's Hospice) [subcutaneous-fentanyl-and-alfentanil-in-palliative-care.pdf \(stpetershospice.org\)](#)