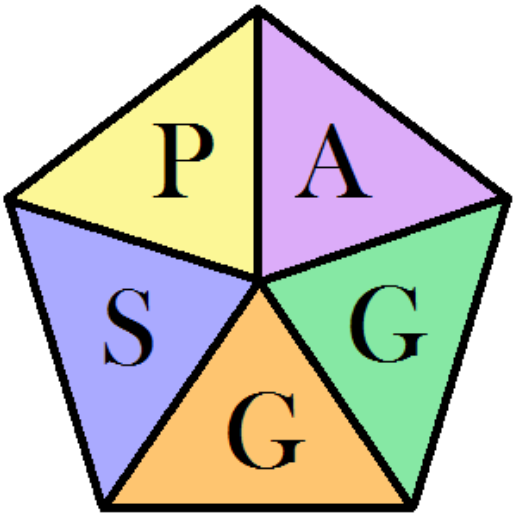


Specialist Palliative Care
Audit and Guidelines Group

Specialist Palliative Care Audit and Guidelines Group (SPAGG)

Prescribing algorithm for patients with pain and renal impairment using ALFENTANIL by subcutaneous injection

Version 2

Coversheet for Specialist Palliative Audit and Guideline Group Agreed Documentation

This sheet is to accompany all documentation agreed by SPAGG. This will assist maintenance of the guidelines as well as demonstrating the governance process undertaken prior to members seeking local approval in their areas of work.

Document Title	**Prescribing algorithm for patients with pain and renal impairment using ALFENTANIL by subcutaneous injection** **Please note there is also a FENTANYL version of this algorithm**
Document Date	August 2021
Document Purpose and Intended Audience	To support any healthcare professional working with palliative patients with pain who also have renal impairment (as defined as eGFR <30ml/min)
Authors	Dr Elizabeth Freshwater, Locum Palliative Medicine Consultant at John Taylor Hospice and Dr Anna Lock, Consultant in Palliative Medicine SWBH NHS Trust
References	See end of guidance
Consultation Process	Algorithm will be audited and reviewed in 1 year
Monitoring	
Review Date (must be within three years)	August 2024
Approval Signatures: SPAGG chair SPAGG deputy chair SPAGG secretary	 Chair: Dr J Tomas Secretary: Dr A Gray
Date Approved by SPAGG:	August 2021
Date submitted to Area Prescribing Committee:	

Prescribing Algorithm for Pain for patients with renal impairment using ALFENTANIL injection subcutaneously

Please note there is also a FENTANYL version of this algorithm

Version History

Version	Date	Summary of Change/Process
1.0	Nov 2019	Adapted from the Sandwell and West Birmingham NHS Trust "Guideline for managing pain in the last days of life for patients with chronic renal impairment"
2.0	Aug 2021	Review alongside Birmingham Administration Form

Guidelines Scope

1. This is for use by professionals in all healthcare settings caring for patients with palliative diagnosis and renal impairment in pain who require **alfentanil by SC injection or infusion**.
2. For the purposes of this document renal impairment may be chronic or acute, and is defined as eGFR <30 mls/min.
3. For the purposes of this document the dying phase is considered to be a prognosis of less than six weeks, or if 'phase of illness' ranking is used then when patient is ranked as 'deteriorating' or 'dying'.
4. This algorithm should be used in conjunction with other SPAGG guidance relating to the care of patients.

OPIOID CONVERSION TABLE
For use in patient with renal impairment (eGFR<30ml/min)

There is no exact equivalence between opioids therefore starting low and titrating upwards is recommended safe practice.

Approximately equivalent opioid doses for starting alfentanil doses in subcutaneous infusions (CSCI):

Oral morphine in 24 hrs	Morphine injection via CSCI	Alfentanil injection via CSCI
30 mg	15 mg	1 mg
60 mg	30 mg	2 mg

Opioid choice in renal impairment: Consider not using morphine in continuous infusion for patients with known pre-existing renal impairment because of the high risk of accumulation and opioid toxicity.

However it is **not** necessary to routinely check the renal function of all patients thought to be entering the dying phase who are comfortable on their regular opioid- even if they develop undetected renal impairment, it may not be necessary to convert them to alternative unless they develop side effects or signs of opioid toxicity. Alfentanil's excretion is not affected by renal impairment, which means it is less likely to cause side effects and opioid toxicity due to accumulation in this situation, and is the drug of choice for continuous subcutaneous infusion.

Starting dose of alfentanil CSCI: this should be based on prior opioid requirements and titrated upwards according to the amount of subsequent PRN doses required *in addition* to the continuous infusion – there is no upper limit provided the pain is responding well to the opioid and there are no symptoms or signs of adverse effects or toxicity.

Breakthrough analgesia accompanying alfentanil CSCI: alfentanil subcutaneous bolus injection has a rapid onset of action (within 10 minutes) but short duration of action (30 minutes or less). Breakthrough subcutaneous analgesia should therefore be the appropriate lower dosage of an alternative opioid e.g. morphine. Alfentanil bolus injection may be helpful for anticipated breakthrough pain where rapid onset is required e.g. wound dressings, positioning and daily care.

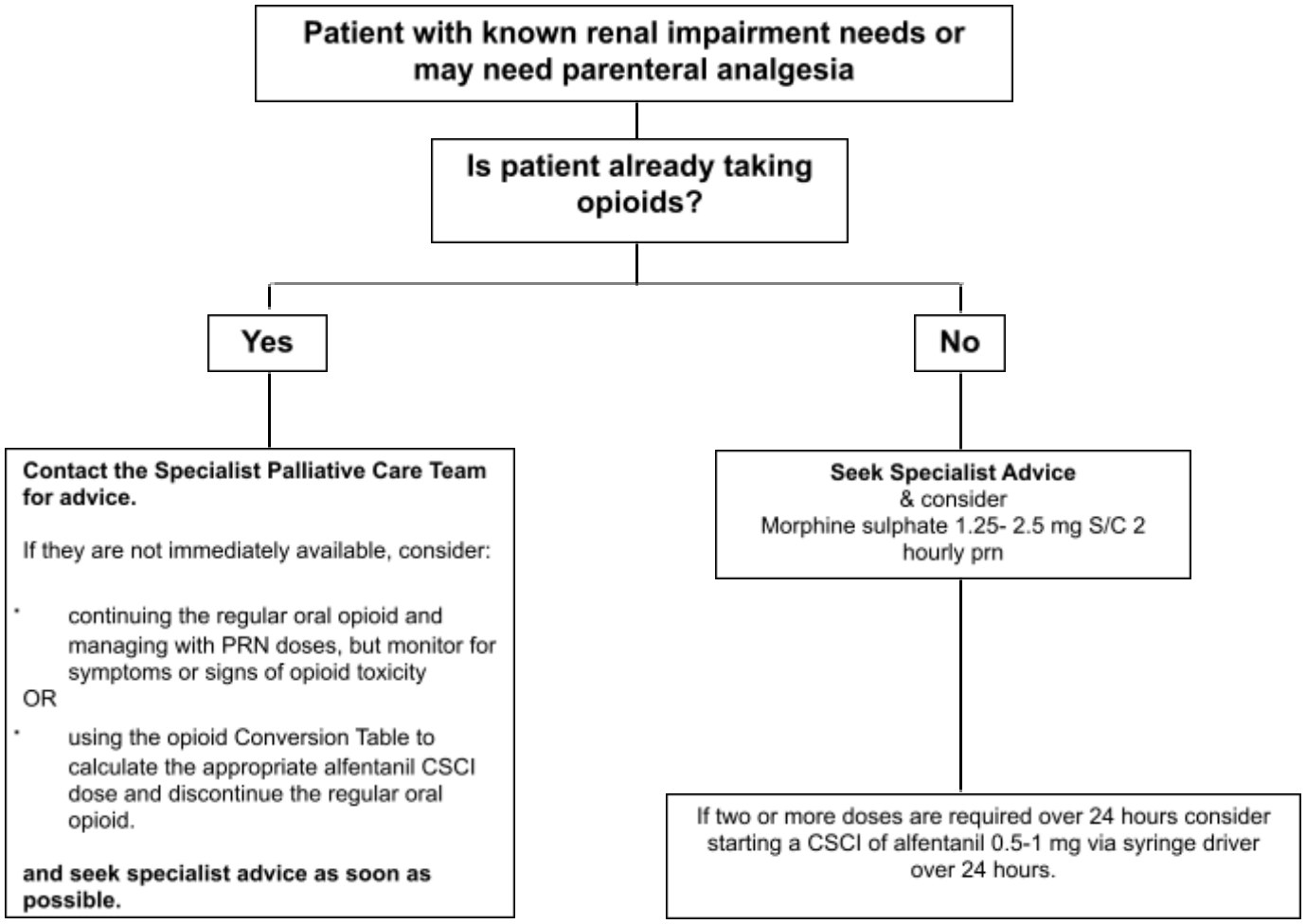
Seek specialist palliative care advice: If converting from alternative strong opioids, if analgesia requirements are escalating, distressing opioid side effects, if clinician is unclear about appropriate choice of opioid or an alternative opioid is prescribed.

Preparations: two alfentanil concentrations are available - 500microgram/ml and 5mg/ml. The 5mg/ml is used in intensive care settings - prescribers are advised to take care when prescribing it, as it is 10 times more potent than the other preparation. It may be required when there are volume issues to be considered when prescribing for use in a syringe driver.

Further information: is available from the WMPCP Guidelines on opioids and dose conversion here.

Prescribing Algorithm for Pain in patients with renal impairment (eGFR <30mls/min) using ALFENTANIL SUBCUTANEOUSLY

Explanation & psychological support for patient/carers/family	Exclude treatable causes for pain e.g. constipation	Consider positioning for comfort



References:

1. Brown *et al.* (2012) Kidney disease from advanced disease to bereavement. *Oxford Specialist Handbook* (2e). Oxford University Press.
2. Douglas C *et al.* (2009) Symptom management for the adult patient dying with advanced chronic kidney disease: a review of the literature and development of evidence-based guidelines by a United Kingdom Expert Consensus Group. *Palliative Medicine*. **23**: 103–110.
3. Twycross *et al*. (2017) Palliative Care Formulary
4. West Midlands Palliative Care Physicians Guidelines 2019