

Guidance for Clinicians:**Medical management for patients dying from COVID-19 related illness**

This document covers the medical management of dyspnoea, respiratory secretions and delirium at the end of life.

- Psychological and spiritual distress may be significant (for patients, whānau and staff); consideration should be made to minimize this and provide appropriate support.
- When converting opioids oral to subcutaneous – halve the dose (morphine 10mg orally = morphine 5mg SC)
- eGFR <30mL/min we recommend use of fentanyl (if available) instead of morphine or oxycodone
- SC = subcutaneous, CSCI = continuous subcutaneous infusion via syringe driver
- In the absence of syringe driver availability resort to regular Q4H SC opioid dosing (morphine and oxycodone)
 - Divide the total daily dose by 6 and administer Q4H
- All medications discussed in this document are compatible with each other and can be mixed in various combinations in the same syringe for CSCI
- Vital sign monitoring is unnecessary, care should be guided by symptom needs and patient comfort

Management of dyspnoea:

- Optimise positioning as guided by patient comfort
- Air movement, such as achieved by the use of a fan, can reduce the sensation of breathlessness
- Remove oxygen mask or nasal prongs if the patient is not tolerating these

Opioid naïve patients – oral dosing:

- Morphine elixir 2.5 - 5 mg PO Q1H PRN OR
- Oxycodone elixir 2.5 - 5 mg PO Q1H PRN OR
- Fentanyl 12.5 - 25 micrograms buccally Q1H PRN

Opioid naïve patients – injectable dosing (if loss of oral route or poor gut absorption):

- Morphine 2.5 - 5 mg SC Q1H PRN OR
- Oxycodone 2.5 - 5 mg SC Q1H PRN OR
- Fentanyl 12.5 - 25 micrograms SC Q1H PRN

Patients already on background opioids:

- Continue background opioid
- Use approximately 1/6th of their total daily opioid dose PRN Q1H as a starting dose and titrate to effect.

Benzodiazepines dosing:

Useful in addition to opioids if significant anxiety/panic associated with dyspnoea.

- lorazepam 0.5 mg PO TDS PRN
- clonazepam tablets 0.25 - 0.5 mg BD PRN
- clonazepam drops (buccal 1 drop = 100 micrograms) 2-3 drops buccally Q8H PRN
- midazolam 1.25 – 5 mg SC Q1H PRN for anxiety associated with dyspnoea; start at lowest dose and titrate to effect.

CSCI dosing:

Generic CSCI starting doses for management of dyspnoea for opioid and benzodiazepine naïve:

- morphine 10 mg + midazolam 10 mg over 24 hours OR
- oxycodone 10 mg + midazolam 10 mg over 24 hours OR
- fentanyl 100 micrograms + midazolam 10 mg over 24 hours

Ensure SC opioid and benzodiazepine PRNS are prescribed (as above) in addition to CSCI

NB: for patients already on long acting opioids (and benzodiazepines) the CSCI starting dose and PRN doses will need to be calculated based on their current background dose.

- E.g if 24 hour oral morphine = 60mg then prescribe 30mg morphine via CSCI and 5mg morphine Q1H PRN

DATED 25/3/20

Management of acute respiratory distress or severe dyspnoea at the end of life:

Crisis medications should be available for all patients at risk of respiratory crisis at end of life; aiming to rapidly sedate patient in the context of extreme respiratory distress

Generic SC crisis medications for opioid and benzodiazepine naïve patients:

- morphine 5 - 10 mg Q10mins PRN OR fentanyl 100 micrograms Q10min PRN
- midazolam 5 - 10 mg Q10mins PRN
 - *NB: in extreme distress the higher dose may be necessary*

If escalating opioid and benzodiazepine doses are required to control respiratory distress consider adding levomepromazine (Nozinan).

- levomepromazine can be effective in reducing respiratory distress without causing respiratory depression.
 - levomepromazine 6.25 - 12.5 mg SC Q2H PRN, titrate to effect
 - levomepromazine CSCI starting dose 12.5 mg over 24 hours, increase in 12.5 mg increments to effect

Management of excessive respiratory tract secretions:

- Avoid IV fluids;
 - These are futile at EOL and can contribute significantly to the volume of respiratory secretions
 - There is no evidence that parenteral fluids (SC or IV) improve a patient's sense of thirst
 - Thirst is mitigated by oral fluids and, if unable to swallow, good mouth care.
- Optimise positioning (as tolerated) to allow drainage of secretions
- Avoid suctioning - there is limited role for suctioning, only consider if visible secretions in the mouth are distressing the patient

Anti-secretory medications to reduce respiratory secretions include:

- hyoscine butylbromide (Buscopan) 20 mg SC Q4H AND/OR start CSCI 60 mg over 24 hours (maximum 120 mg total per 24 hours)
- glycopyrronium bromide (Glycopyrrolate) 200 - 400 micrograms SC Q4H/PRN AND/OR start CSCI 800-1600 micrograms over 24 hours (maximum 1600 micrograms total per 24 hours)
- octreotide 100 - 200 micrograms Q8H SC regularly OR CSCI 200 - 600 micrograms over 24 hours

Management of delirium/agitation/restlessness:

- Exclude urinary retention, faecal impaction or uncontrolled pain
- Pharmacological options: antipsychotic medication is recommended first line, not benzodiazepines

Antipsychotic dosing:

- haloperidol 0.5 - 1 mg SC Q4H PRN (max 5 mg in 24 hours – if needing more than this to control agitation switch to levomepromazine)
- levomepromazine (more sedating than haloperidol) 6.25 mg SC Q4H PRN is a reasonable starting dose, a range of 6.25 – 12.5 mg may be used (doses of 25-50mg/24 hours are typically sedating)
- If agitation is severe a higher bolus dose of levomepromazine such as 25 - 50 mg may be required and/or commencement of a CSCI

For management of other symptoms such as pain, cough, nausea, pruritis please refer to our guidelines:

Waikato DHB Palliative Care Service intranet site:

<https://intranet.sharepoint.waikato.health.govt.nz/Pages/Regional%20Cancer%20Centre/Palliative-Care-services-and-resources.aspx>

Hospice Waikato website:

Health professionals: <https://www.hospicewaikato.org.nz/education>

Clinical guidelines and drug protocols:

<https://www.hospicewaikato.org.nz/clinicalguidelinesdrugprotocols>

For further Specialist Palliative Care advice contact the SMO oncall via switchboard

DATED 25/3/20