COVID-19: Care of the dying patient when **UNABLE** to obtain a syringe driver – non-injectable alternatives

At the end of life when the oral route is lost, **effective management of symptoms is best achieved using a syringe driver** to deliver a continuous low dose of medication that can be easily titrated. This guidance provides options for care of a patient dying with COVID-19 **only when a syringe driver and/or injectable medications are unavailable**. Please see the Kirkwood Toolkit for management of end of life symptoms when injectable medication and/or syringe drivers are available.

At the end of life, rectal and oromucosal (buccal/sublingual) treatments are not generally a first line measure. Should injectable medication not be available, the use of rectal or buccal/sublingual medications can be considered. It should be noted however that these measures mean increased levels of exposure for healthcare staff. The potential risks of administering oromucosal medications to patients with impaired swallowing needs to be considered and balanced against any potential benefit.

In the absence of a syringe driver and injectable medications, we have provided examples of medication which can be administered via alternative routes in this less than ideal situation.

**Breathlessness and restlessness**

This guidance is for patients experiencing respiratory distress at the end of life where the usual first-line medication of choice would be midazolam SC.

For all buccal and sublingual medications, please ensure oromucosal hydration is optimised where possible to facilitate absorption and ensure adequate PPE is worn during administration.

**IF SYRINGE DRIVER AND INJECTABLE MEDICATIONS UNAVAILABLE:**

**1. BUCCAL MIDAZOLAM 2.5-10MG PRN**
- Frequency as per SC midazolam dosing
- Maximum dose 100mg/24hrs
- Available formulations: oromucosal solution (5mg/ml) pre-filled syringes – 2.5mg, 5mg, 7.5mg & 10mg

**2. SUBLINGUAL LORAZEPAM 0.5-1MG PRN**
- Please note only certain brands can be administered sublingually (please check local availability with pharmacy)
- Short acting
- Maximum dose 4mg/24hrs in divided doses

**3. RECTAL DIAZEPAM 2-5MG PR PRN TDS**
- Longer duration of action than lorazepam and midazolam, but can require up to TDS dosing and cannot be administered via oromucosal route
- Maximum dose 30mg/24hrs in 3 divided doses
- Available as 1.25ml or 2.5ml tubes at strength of 2mg/ml

Please speak to Kirkwood Hospice for further advice at any time or if symptoms persist
Terminal Agitation

This guidance is for management of delirium and agitation in a person who is in the last hours to days of life where the aim is for a comfortable death.

IF SYRINGE DRIVER AND INJECTABLE MEDICATION UNAVAILABLE:

(1) ORODISPERSIBLE OLANZAPINE 2.5MG 4-6HRLY PRN
- Maximum dose 10mg/24hrs
- Available forms 5mg & 10mg tablets. 5mg tablets can be halved if necessary

(2) ORODISPERSIBLE RISPERIDONE 0.5MG 12HRLY PRN
- Maximum BD dosing
- Maximum dose 3mg/24hrs in divided doses

(3) CONSIDER BENZODIAZEPINE
- Please see breathlessness and restlessness guidance on page 1

Please speak to Kirkwood Hospice for further advice at any time or if symptoms persist

Secretions

Please see Kirkwood Toolkit guidance ‘End of life management of secretions’ for alternatives to hyoscine butylbromide via syringe driver

Pain

At the end of life, opioids are often first line for treatment of pain. Patients whose pain has been well managed on alternatives (e.g. gabapentin) may need opioid alternatives when they are unable to manage these medications.

Please seek advice from Kirkwood Hospice should this be the case. If there is no access to injectable medications and/or syringe driver, options for opioid administration are limited in those who have lost their oral route. Transdermal patches can provide a maintenance opioid dose but take a number of hours to become effective.

There are a number of documents available on the Kirkwood Toolkit page to assist with conversions and switching opioids, including advice on what to do if a syringe driver is unavailable. These documents are as follows:

- Alternatives to common palliative care drugs – strong opioids
- Alternatives to common palliative care drugs – strong opioids via syringe driver
- Opioid conversion chart

Please speak to Kirkwood Hospice for further advice at any time or if symptoms persist