Specialty guides for patient management during the coronavirus pandemic

Clinical guide for the management of palliative care during the coronavirus pandemic: Symptom management using non-oral and non-parenteral routes for administration of medication

15 April 2020 Version 1

The coronavirus global health threat and the national response to it have resulted in a variety of changes to the provision of care in the community setting, including the need for social distancing and the increased use of telephone or video consultations by primary and community health and care staff. These changes pose particular challenges to the administration of medication for symptom control for those with advanced life-threatening illness, including in the last days of life and those with suspected or confirmed COVID-19.

Medication to manage common symptoms such as pain, breathlessness, nausea and vomiting and cough would normally be administered via the oral or subcutaneous route. Where a syringe driver is not available, bolus administration of medication may still be possible provided those caring for the patient are willing and able to administer subcutaneous medications, for example using a no needle technique. However, it is the responsibility of the healthcare professional to ensure that these carers are confident, competent and supported to do so, and that there is a clear governance process to support this practice with particular attention to issues around safeguarding.

Local palliative care guidelines on care and medication should continue to be followed wherever possible. The recently published COVID-19 rapid guideline: managing symptoms (including at the end of life) in the community provides guidance on medication for the management of common symptoms in patients with COVID-19.

When the oral or subcutaneous route is not possible, use of other routes may be required, and unpaid/unregistered carers may need to administer medications with remote support from GPs/district nursing/specialist palliative care teams. Healthcare professionals involved

in a patient's care continue to have responsibility for advising them, and those involved in their care, how to use the medications that they have recommended/prescribed. Local medication and administration records (MAARs) should continue to be used to record and administer such medication.

The tables below outline options for administering medications frequently used for managing the key symptoms related to COVID-19 as well as in palliative care.

Points to note:

- Before deciding that an oral route is not possible, consider alternative formulations, for example, liquid as opposed to tablets.
- Infection prevention measures remain important when administering medication through any route.
- Inclusion in these tables does not guarantee availability – there is a need to work with regional/local pharmacy partners to ensure that any medication prescribed is available.
- The order of medications in the table do not necessarily indicate preferred order of use.

Safeguarding

It is our understanding that the COVID-19 community services prioritisation plan, the Coronavirus Act 2020, Coronavirus (COVID-19) changes to the Care Act 2014 and other COVID-19 guidance are all indicating that safeguarding children and adults is as critical during COVID-19 as it is statutory at other times. Staff across the health and care sector are advised to:

- Download the free NHS Safeguarding App, which has local safeguarding contacts.
- Follow #COVIDSafeguarding via @NHSsafeguarding who will be posting daily updates and key messages.
- Join our COVID-19 safeguarding digital community of practice.

Cough

Treatment	Dosage				
Initial management: use simple non-drug measures, for example, taking honey	A teaspoon of honey.				
First choice, only if cough is distressing: codeine linctus (15 mg/ 5 mL) or codeine phosphate tablets (30 mg)	15 mg to 30 mg every four hours as required, up to four doses in 24 hours. If necessary, increase dose to a maximum of 30 mg to 60 mg four times a day (maximum 240 mg in 24 hours).				
Second choice, only if cough is distressing: morphine sulphate oral solution (10 mg/ 5 mL)	2.5 mg to 5 mg as required every four hours. Increase up to 5 mg to 10 mg every four hours as required. If the patient is already taking regular morphine increase the regular dose by a third.				
Alternatives if oral route not available	**Buccal**	**Sublingual**	**Orodispersible**	**Transdermal**	**Rectal**
	x	Concentrated oral morphine (oramorph concentrated solution 20mg/ 1mL®) 2 mg to 5mg (0.1 mL to 0.25 mL) every four hours as required.	**x**	**x**	**x**

Fever

Treatment	Dosage				
Adults (18 years and over) and able to swallow	Paracetamol 0.5 g to 1 g every four to six hours as required, maximum 4 g per day **or** Ibuprofen 400 mg three times per day tablets or suspension (see MHRA guidance for use of NSAID in COVID-19 https://www.gov.uk/government/news/commission-on-human-medicines-advice-on-ibuprofen-and-coronavirus-covid-19)				
Alternatives (if oral route not available)	**Buccal**	**Sublingual**	**Orodispersible**	**Transdermal**	**Rectal**
			Calpol six plus® fastmelts (250 mg) two to four tablets every four to six hours as required.		Paracetamol suppositories 500 mg or 1g PR every four to six hours as required. Diclofenac suppositories 50 mg PR TDS

Breathlessness at end of life

Treatment	Dosage				
Opioid naive (not currently taking opioids) and able to swallow	Morphine sulphate immediate-release 2.5 mg to 5 mg every two to four hours as required **or** morphine sulphate modified-release 5 mg twice a day, increased as necessary (maximum 30 mg daily).				
Already taking regular opioids for other reasons (for example, pain relief) and able to swallow	Morphine sulphate immediate-release 5 mg to 10 mg every two to four hours as required **or** one twelfth of the 24-hour opioid (morphine equivalent) dose for pain, whichever is greater.				
Opioid if unable to swallow	Morphine sulphate 10 mg over 24 hours as a continuous subcutaneous infusion via a syringe pump, increasing stepwise to morphine sulphate 30 mg over 24 hours as required. If already taking opioids contact specialist palliative care team for advice.				
Benzodiazepine if required in addition to opioid	Midazolam 10 mg over 24 hours via the syringe driver, increasing stepwise to midazolam 60 mg over 24 hours as required.				
Add parenteral morphine or midazolam if required	Morphine sulphate 2.5 mg to 5 mg subcutaneously up to every 1 hour as required. Midazolam 2.5 mg subcutaneously up to every 1 hour as required. (See BNF for more details on dosages).				
Alternatives (if oral or subcutaneous routes not available)	**Buccal**	**Sublingual**	**Via PEG/RIG/NG tube**	**Transdermal**	**Rectal**
	Buccal midazolam (Buccolam®) 2.5 mg prefilled oral syringes. 2.5 mg 2-hourly as required.	Lorazepam 1 mg tablets. 0.5 mg SL up to four times daily as required.	Morphine sulphate liquid 2.5 mg to 10 mg every two to four hours as required.	X	MST Continus® tablets 5 mg PR twice daily (increased as necessary to maximum 30 mg daily).

	Midazolam 10 mg/ 2 mL injection. 2.5 mg two-hourly as required.	Concentrated oral morphine (oramorph concentrated solution 20 mg/ 1 mL®). 2 mg to 5 mg (0.1 mL to 0. 25 mL) SL every four hours as required. Concentrated Oxycodone (OxyNorm Concentrate 10 mg/ mL oral solution). 1 mg to 2 mg (0.1 mL to 0.2 mL) SL every four hours as required (for use in renal impairment). Morphine sulphate injection 10 mg/ mL. 2.5 mg to 5 mg SL every four hours as required. Oxycodone injection, 10 mg/ mL, 1.25mg to 2.5 mg SL every four hours as required (for use in renal impairment).			

Anxiety, agitation and delirium

Treatment	Dosage				
Anxiety or agitation and able to swallow: lorazepam tablets	Lorazepam 0.5 mg to 1 mg four times a day as required (maximum 4 mg in 24 hours). Reduce the dose to 0.25 mg to 0.5 mg in elderly or debilitated patients (maximum 2 mg in 24 hours). Oral tablets can be used sublingually (off-label use).				
Anxiety or agitation and unable to swallow: midazolam injection	Midazolam 2.5 mg to 5 mg subcutaneously every two to four hours as required. If needed frequently (more than twice daily), a continuous subcutaneous infusion may be considered starting with midazolam 10 mg over 24 hours via a syringe pump (if available). Reduce dose to 5 mg over 24 hours if estimated glomerular filtration rate (eGFR) is less than 30 mL per minute.				
Delirium and able to swallow: haloperidol tablets	Haloperidol 0.5 mg to 1 mg at night and every two hours when required. Increase dose in 0.5 mg to 1 mg increments as required (maximum 10 mg daily, or 5 mg daily in elderly patients). The same dose of haloperidol may be administered subcutaneously as required rather than orally, or a continuous subcutaneous infusion of 2.5 mg to 10 mg over 24 hours via a syringe pump. Consider a higher starting dose (1.5 mg to 3 mg) if the patient is severely distressed or causing immediate danger to others. Consider adding a benzodiazepine such as lorazepam or midazolam if the patient remains agitated (see dosages above).				
Delirium and unable to swallow: levomepromazine injection	Levomepromazine 12.5 mg to 25 mg stat and hourly as required (6.25 mg to 12.5 mg in the elderly). Maintain with a continuous subcutaneous infusion of 50 mg to 200 mg over 24 hours via a syringe pump. Consider midazolam alone or in combination with levomepromazine if the patient also has signs of anxiety (see dosages above).				
Alternatives (if oral or subcutaneous routes not available)	**Buccal**	**Sublingual**	**Orodispersible**	**PEG/RIG/NG Tube**	**Rectal**
	Buccal midazolam (Buccolam®) 2.5mg prefilled oral syringes. 2.5 mg two-hourly as required. Midazolam 10 mg/ 2mL injection. 2.5	Levomepromazine 6 mg tablets (Levinan®). 3 mg to 6 mg SL four to six-hourly as required. Levomepromazine 25mg tablets.	Olanzapine orodispersible tablets 5 mg. 2.5 mg to 5 mg (1/2 to one tablet) ON (can be increased to BD if required, max 10 mg/ 24 hours).	Clonazepam liquid (500micrograms/5 mL or 2mg/5 mL) 500 micrograms to 1mg every six hours as required. Levomepromazine 25mg tablets	Diazepam enema (2.5 mg or 5 mg). 2.5 mg to 5 mg PR four to six-hourly as required.

	mg buccally two-hourly as required.	6.25 mg SL four to six-hourly as needed. Levomepromazine 25 mg/ mL injection 12.5 mg to 25 mg SL four to six-hourly as required.	Risperidone orodispersible tablet 0.5 mg OD (can be increased to BD if required).	(crushed and dispursed in 10 mLs water). 6.25mg every four to six hours as required. Levomepromazine injection 25mg/mL 12.5 mg to 25 mg SL four to six-hourly as required.	

Pain

Treatment	Dosage				
Opioid	Morphine sulphate 2.5 mg to 5 mg PO every two to four hours as needed. Morphine sulphate modified release 5 mg to 10 mg BD regularly and continue with immediate release morphine for breakthrough doses at 1/6th total daily opioid dose. Titrate as needed. If estimated glomerular filtration rate (eGFR) is less than 30 mL per minute, use equivalent doses of oxycodone instead of morphine sulphate (see Prescribing in palliative care in the BNF for more details; https://bnf.nice.org.uk/guidance/prescribing-in-palliative-care.html				
Add parenteral morphine	Morphine sulphate 2.5 mg to 5 mg subcutaneously every 2 to 4 hours as required. If more than two doses required consider morphine sulphate 10 mg as a continuous subcutaneous infusion via a syringe pump over 24 hours. Titrate as needed. If estimated glomerular filtration rate (eGFR) is less than 30 ml per minute, use equivalent doses of oxycodone instead of morphine sulphate (see Prescribing in palliative care in the BNF for more details) (See BNF for more details on dosages).				
Alternatives (if oral or subcutaneous route not available)	**Buccal**	**Sublingual**	**Via PEG/RIG/NG tube**	**Transdermal****	**Rectal**
	X	Concentrated oral morphine (Oramorph concentrated solution 20mg/1ml®). 2 mg to 5 mg (0.1 mL to 0.25 mL) SL every	MST Continus® Sachets 20mg/60mg/100mg BD. Zomorph® capsules 10/30/60/100mg BD (can be opened and contents flushed	Buprenorphine 5/10/20 mcg/ hour pwatches – change every seven days. Buprenorphine 35/52/70 mcg/ hour patches – change every four days.	MST Continus® tablets 5 mg PR TWICE daily (increased as necessary to maximum 30mg daily).

		four hours as required. Concentrated Oxycodone (OxyNorm® Concentrate 10mg/ml oral solution®). 1 mg to 2 mg (0.1 mL to 0.2mL) SL every four hours as required (for use in renal impairment). Morphine sulphate injection 10 mg/ mL. 2.5 mg to 5 mg SL every four hours as required. Oxycodone injection 10 mg/ mL., 1.25 mg to 2.5 mg SL every four hours as required (for use in renal impairment).	down tube 8Fr or greater).	Fentanyl 12/25/37.5/50/75/100 mcg/ hour patches – change every three days. **Cautions: See BNF or SPC for relative potency** ALL transdermal patches require time to reach steady state, not suitable for rapid titration or unstable pain** Caution in fever – can cause increased absorption**	

Nausea and vomiting

Treatment	Dosage				
Generalised nausea	Haloperidol 500 micrograms to 1 mg PO/SC every four to six hours as required **or** Metoclopramide 10 mg PO/SC every six to eight hours as required. **or** Cyclizine 50 mg PO/SC every six to eight hours as required.				
Refractory nausea	Levomepromazine 6.25 mg PO/SC every four to six hours as required.				
Continuous subcutaneous infusion via syringe pump over 24 hours (if available)	Haloperidol 2.5 mg to 10 mg (5 mg in frail/elderly). Metoclopramide 30 mg. Cyclizine 150 mg. Levomepromazine 12.5 mg to 25 mg.				
Alternatives (if oral or subcutaneous routes not available)	**Buccal**	**Sublingual**	**Orodispersible**	**Transdermal**	**Via PEG/RIG/NG tube**
	Prochlorperazine 3 mg buccal tablets.1 to 2 tablets buccally up to twice daily as required.	Levomepromazine (Levinan®) 6 mg tablets. 3 mg (1/2 tablet) SL four to six-hourly as required.	Olanzapine orodispersible tablets 5 mg. 2.5 mg to 5 mg (half to one tablet) once daily. (can be increased to twice daily if needed, max 10 mg/ 24 hours). Ondansetron orodispersible tablets 4 mg. One tablet every six to eight hours as required (max 16 mg/24hours).	Hyoscine hydrobromide patch (Scopoderm®) One patch every 72 hours. Granisetron patch 3.1 mg/ 24 hours. One patch changed every seven days. **Please note – not ideal given time for effect & lack of PRN option, should be used only when all other options have failed**	Metoclopramide liquid 10 mg every six to eight hours as required. Domperidone liquid 10 mg every six to eight hours as required.

Noisy rattly breathing

Treatment	Dosage				
By subcutaneous injection	Hyoscine butylbromide 20 mg every four to six hours as required **or** Glycopyrronium 200 micrograms every four to six hours as required.				
Continuous subcutaneous infusion via syringe pump over 24 hours (if available)	Hyoscine butylbromide 60 mg to 120 mg **or** Glycopyrronium 600 micrograms to 1.2 mg.				
Alternatives (if subcutaneous route not available)	**Buccal**	**Sublingual**	**Orodispersible**	**Transdermal**	**Via PEG/RIG/NG tube**
	Hyoscine hydrobromide 300 microgram tablets (Kwells®) 300 micrograms buccally every six to eight hours as required.	Hyoscine hydrobromide 300 microgram tablets (Kwells®) 300 micrograms SL every six to eight hours as required. Atropine 1% eye drops. Two to four drops SL every four hours as required. Glycopyrronium injection. 100 micrograms to 200 micrograms SL every six hours as required.	X	Hyoscine hydrobromide patch (Scopoderm®) 1 patch every 72 hours. Patches can be cut into ¼ or ½ if dose reduction needed.	Glycopyrronium oral solution 1 mg/ 5 mL. 200 micrograms every eight hours as required. Glycopyrronium injection 200micrograms/mL. 200micrograms every eight hours as required.

Resources

Care Quality Commission and General Medical Council joint statement on community-based prescribing for COVID-19 symptoms: https://content.govdelivery.com/accounts/UKCQC/bulletins/28518c1

Helix Centre resources to support carers in end of life care: https://helixcentre.com/project-end-of-life-toolkit

NICE COVID-19 rapid guideline: managing symptoms (including at the end of life) in the community: https://www.nice.org.uk/guidance/ng163

Royal Pharmaceutical Society ethical decision making framework during the COVID-19 response: https://www.rpharms.com/resources/pharmacy-guides/coronavirus-covid-19/coronavirus-information-for-pharmacists-and-teams/ethical-decision-making

This was drawn from a range of locally published guidelines, collated and edited by Mel Presland, Consultant Pharmacist in Palliative Care, Sobell House, Oxford University Hospitals NHS Foundation Trust, in consultation with the Association of Supportive and Palliative Care Pharmacy.