COVID-19 DOCUMENT

End of Life Care for Patients with COVID-19

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End of Life Care for Patients with COVID-19

Version 2

Date: 30/09/2020

END OF LIFE CARE FOR PATIENTS WITH CORONAVIRUS

BACKGROUND

The following advice relates to patients being managed **OUTSIDE OF CRITICAL CARE** and who are **thought likely to die in the coming hours or days** despite all previous or ongoing best efforts.

Some patients will be suffering from **multi organ failure** and/or **thrombo-embolic disorders** and some primarily from **respiratory failure**.

Some patients dying from COVID-19 suffer a significant degree of **delirium or agitation** which may be difficult to manage.

AIMS

This document aims to give to some general and also specific advice about how to manage distressing symptoms in this patient group. Further advice on symptom control can also be obtained from your individual hospital site's supportive and palliative care team (contact details below):

- QEHB extension **14548**
- BHH extension **42442**
- GHH extension **47316**
- Solihull extension **44127 (please note this office is not routinely staffed and calls will be forwarded on to our teams at BHH /GHH)**

GETTING ADVICE ON SYMPTOM CONTROL

For any patient where generic advice is required on symptom control please:

1. **Check the clinical record** – if the patient is already known to palliative care there may well be a plan for symptom control recorded in the notes.

2. Access the **West Midlands Palliative Care guidelines** via the Trust Intranet.
    - If accessing the guidelines from a Trust PC you will need to use a computer that allows **internet** access.
    - If using a smart phone the website is www.wmcares.org.uk and click on 'access guidelines'

Our team offices will aim to continue to provide 7/7 support during normal working hours. **Out of hours advice can also be obtained via switchboard and ask for palliative care on call.**

GENERAL CONSIDERATIONS

For all patients at the end of life, both their **care and prescribing should be individualised**. The following guidance on drugs and dosing may need to be tailored to specific situations and clinical scenarios – e.g. patients with a known intolerance to morphine or likely to develop this due to renal failure. **Seek advice if needed**.

The aim of using drugs in end of life care is to judiciously use the **right drugs and doses** via the **most appropriate and practical route**.

- Some patients may need little or no medication for symptom control.
- Some may need very high doses of medication (and sometimes in combination with other drugs) to achieve the desired response.

Patients, families and sometimes colleagues will need **support and reassurance** that the use of drugs for symptom control is to ensure **comfort** and NOT to speed up the process of dying.

Generally, most patients who are dying and breathless are relieved to know that drug treatment is available to help them and ensure their comfort. Some patients however may be extremely concerned about the use of such drugs and will need great reassurance that the aims of treatment are for comfort and not to simply render them unconscious. **Explicit refusal of drug treatment from a patient with capacity must be respected at all times**.

Symptom control drugs can be given alongside any other active intervention deemed necessary by the parent team (e.g. antibiotics, oxygen and steroids). Trying to **ensure comfort** alongside any appropriate ongoing active medical treatment should be regarded as **normal practice** and not a mixed message.

DRUGS FOR COMFORT AT END OF LIFE

Generally these drugs will need to be given by **injection** as these patients often have difficulty swallowing. Routes will include **intravenous** (IV) and **subcutaneous** (SC) administration.

Drugs may be given as **bolus doses** (either as required or regularly) or **continuously** via a pump if needed – see below under ‘Drug administration’.

Drugs for comfort at the end of life include the following:

Drug Class	Examples	Uses
Benzodiazepines	Midazolam, lorazepam	• Fear, anxiety and agitation
Strong opioids	Morphine, oxycodone	• Typically used for pain • Can be used to relieve breathlessness – reduces the sensitivity and reflex response to the raised pCO2 levels seen in respiratory failure.
Antipsychotic drugs	Levomepromazine, haloperidol	• Typically used for nausea (low doses) • Agitation and delirium (higher doses)
Hyoscine butylbromide		• Reduce airway secretions and 'death rattle' – this symptom may not bother the patient necessarily but can be upsetting for relatives and staff alike.

DRUG DOSING – PRN

The following advice on doses should be regarded as **general** rather than 'one size fits all'.

Generally it would be helpful for all clinical teams to be **more specific** when prescribing the frequency with which PRN drug doses can be repeated. Simply prescribing drugs as 'PRN' without qualifying the frequency e.g. every 30 minutes, hourly etc. can lead to difficulty for nursing staff in having to use their discretion when trying to decide whether to give a further dose or not .

- For those patients in great distress and likely to die soon then it may well be best to prescribe **'repeat after 20 minutes if still not comfortable '.**
- For those in whom death is not thought imminent then prescribing PRN 1-2 hourly or even 4 hourly may be more appropriate.

Deliberately there are **no maximum doses per 24 hours** stated for the drugs below. However repeated dosing with the same drug with poor response, despite increasing dose and frequency, should lead to consideration that perhaps this drug is not ideal for your patient.
In these instances please seek advice.

Benzodiazepines = FIRST LINE for anxiety, fear and agitation

Midazolam – suggest start with **low doses** for patients naïve to this drug but be prepared, if response is poor or short lived and anxiety is severe, to **escalate dosing sharply if required**.

- **Generally**: Start with 2.5 mg SC or IV
- If patient **is particularly frail**: use 1.25mg
- If **extremely distressed** or show **tolerance** to this group of drugs: may require higher doses e.g. 5 -10 mg

If ward areas **cannot access midazolam** then lorazepam can be used as a substitute – generally **2.5 mg of midazolam can be regarded as 'equivalent' to 500 mcg of injectable lorazepam**.
Seek advice.

For patients not responding to midazolam – this might be because doses have been too low or not frequent enough. Some patients might need much higher doses than normal. **Seek advice** if needed.

OR

They might need to use **midazolam in combination with another** drug e.g. a strong opioid or antipsychotic. **Seek advice** if needed.

If the effect of **midazolam is effective but short-lived** the patient might require a **continuous infusion** of midazolam.

- Infusion **dose** should generally be guided by **previous 24 hour requirements**.
- **Seek advice** if needed and see below

Strong Opioids = generally used in combination with a benzodiazepine

- **Morphine** - suggest start with **low doses** for patients naïve to this drug but be prepared to escalate dosing sharply if response is poor or short lived and anxiety due to breathlessness is severe.
    1. Doses as low as 1.25-2.5 mg IV or SC may give significant relief for some patients
    2. In some patients higher doses, e.g. 5 -10 mg may be required if they are extremely distressed or tolerant of this group of drugs.

- For patients where **dyspnoea** is the main symptom rather than anxiety
    1. Start with morphine
    2. Add in a benzodiazepine if symptoms not resolving.

For patients not responding to morphine bolus dosing

Ask:

1. Are doses **too low** or **too infrequent**?

2. If not already being used alongside **midazolam** then consider this now as an option.

3. **Continuous infusion of morphine** can also be used – once again infusion dose should be determined by previous 24 hour requirements. **Seek advice** if needed.

4. If morphine is not available or well tolerated use **oxycodone** – generally **doses are 50% of morphine dosing**. **Seek advice.**

5. For patients already taking morphine or another strong opioid **seek advice**.

Antipsychotic drugs – generally in conjunction with a strong opioid or benzodiazepine and best used when **DELIRIUM** is prominent

These drugs can **reduce delirium** and in higher doses can cause sedation. For some patients **sedation might be a useful side effect** when managing **terminal restlessness.**

- **Levomepromazine** = FIRST LINE in dying patients.
  1. Generally - **low doses** e.g. 6.25 mg – 12.5 mg SC/IV can be used to begin with especially if nausea is a feature. Clinical experience would suggest that for agitation and anxiety significantly higher doses may be needed (e.g. 25 mg and above). 3.125 mg might be a starting dose in the frail elderly.
  2. Can also be given as a **continuous infusion** – doses guided by previous 24 hour requirements.
  3. Can be used in **conjunction with morphine and midazolam** – in exceptional circumstances it can be used with both drugs simultaneously.

If levomepromazine is not available use haloperidol – **Seek advice from palliative care or Geriatric Medicine**

Hyoscine butylbromide

- Dose: **20 mg IV or S/C**

- May be useful for **preventing the further build-up of airway secretions** / pooling of saliva but poor evidence base .

- **Will not clear existing secretions** – reassurance to family, laying the patient high in the bed and to one side might be helpful.

- If secretions do appear to cause the patient distress then consider the use of sedative drugs e.g., midazolam as described above.

- Can be also given **continuously in higher doses** e.g. 60-120 mg / 24 hours via an infusion pump.

- If hyoscine butylbromide not available, **glycopyrronium 400 micrograms SC** may be used.

PRN DRUGS AND ROUTE OF ADMINISTRATION

Intravenous (IV) via central or peripheral venous catheter.

- **Not all patients need to have drugs via IV route but consider using IV access if already available**

OR

Subcutaneous (SC)

- **If IV route is lost or no longer available**

Ward staff are advised to source and use subcutaneous indwelling cannulas (often known as 'butterfly needles' or 'soft sets')

Rather than subject your patient to repeated SC bolus injections the recommendation is to place the **indwelling cannula in the skin** and secure it with a dressing e.g. Tegaderm .

- Suggested sites for SC cannula would include **upper arms and torso** (and in agitated patients skin over the scapula might be used to reduce likelihood of it being pulled out)

CONTINUOUS DRUG INFUSION e.g using a syringe driver

This option should be considered for all patients who are **deteriorating rapidly** and who have been shown to **require repeated bolus dosing** (e.g. more than 2 doses in 24 hours)

Once again it should be noted that some patients, families and also staff might have **concerns** about the use of an infusion pump and regard it as unnecessary overtreatment or unwarranted sedation.

The aim is to provide a continuous infusion of drugs that have been found to be useful to the patient in managing their symptoms. As a general rule the **doses of drugs given in the previous 12- 24 hours can be used to guide the 24 hour infusion dose required.**

Usually the drug infusion would be given via the **subcutaneous** route (but use a **second and separate skin cannula NOT the cannula being used for bolus dosing**)
However the drug infusion can also be given by the IV route if desired or preferred.

NB:

It may still be necessary to give additional PRN medication once the continuous infusion is running. Please ensure this is prescribed as above.

If using a SC infusion it may take a number of hours for absorption to take effect.
If your patient is suffering distress NOW give a bolus dose of medication whilst setting up the infusion pump

- **McKinley pumps = 1st line**
    - Many ward areas will be familiar with the use of McKinley pumps and should continue to use these if they are available.
    - In the event of non-availability of McKinley pumps then see below as for 50 ml infusion pumps

- **50 ml infusion pumps – typically 'Braun' or IVAC devices**
    - Some ward areas (e.g. at QEHB) will already be familiar with using these drugs in palliative care.
    - The pumps can be used to give SC or IV infusions.

Dosing: In palliative care we usually suggest the following for **50 ml infusion delivery**

1. **Round up** the total drug and diluent volume to **24 ml** and run at a **CONTINUOUS rate of 1ml /hour**
2. For **larger volumes** round up to **48ml** and run at **2 ml / hour**.
3. **Additional drugs** for symptom control should be given as a **PRN bolus** NOT by altering the infusion rate.

Combinations of drug infusions in the same syringe are quite common in palliative and end of life care. **See West Midlands Palliative Care Guidelines** under:
The Syringe Driver / pump > Mixing drugs for more information.

In the event of non-availability of a suitable infusion pump drugs can be prescribed to be given regularly via either the SC or IV route.

The frequency of bolus administration should be determined by previous patient response but generally please bear in mind the following on a case by case basis:

- Midazolam may be effective for 1-4 hours- or longer in renal impairment
- Morphine may be effective for up to 4 hours - or longer in renal impairment

Thank you for taking the time to read this guidance. If you need further help or assistance please ring your hospital supportive and palliative care team on the extension numbers below:

QEHB	**14548**
GHH	**42442**
GHH	**47316**
Solihull	**44127**

GUIDANCE SHEET 1

PRN DRUGS AND DOSES FOR CORONAVIRUS PATIENTS BEING CARED FOR OUTSIDE OF CRITICAL CARE AND WHO ARE AT RISK OF DYING IMMINENTLY

What drugs and doses should I use to ensure my patient is comfortable?

Please see also additional end of life care guidance notes as this advice is general and not specific.

Is your patient distressed from symptoms of respiratory / organ failure?

- If **YES** – offer reassurance and emotional support in first instance

If further support is needed offer patient medication to:

- Help relieve breathlessness / reduce anxiety and to help with sleep or rest.

If medication declined by patient continue to offer reassurance and emotional support and ask again later if they wish to reconsider having medication for comfort.

For patients who are agreeable to medication and primarily anxious, agitated or scared give:

- **Midazolam 1.25- 2.5 mg SC or IV FIRST LINE**
- **Morphine 1.25 - 2.5 mg SC or IV SECOND LINE**

Repeat after 20 minutes if not effective – consider using higher dose or both drugs in combination.

Review again after further 20 minutes. If still not comfortable ring and speak to palliative care for advice – see contact numbers below

For dying patients who are agitated but primarily suffering from delirium give:

- **Levomepromazine 6.25-12.5 mg SC or IV (consider 3.125 mg in frail elderly)**

Repeat after 20 minutes if not effective and consider using higher dose or in combination with midazolam as above.

Review again after further 20 minutes - if still not comfortable ring and speak to palliative care for advice – see contact numbers below

NB –Always consider if other factors such as urinary retention, faecal impaction or pain are causing or contributing to delirium and treat accordingly

If patient is now comfortable continue to regularly review and repeat PRN medication when needed.

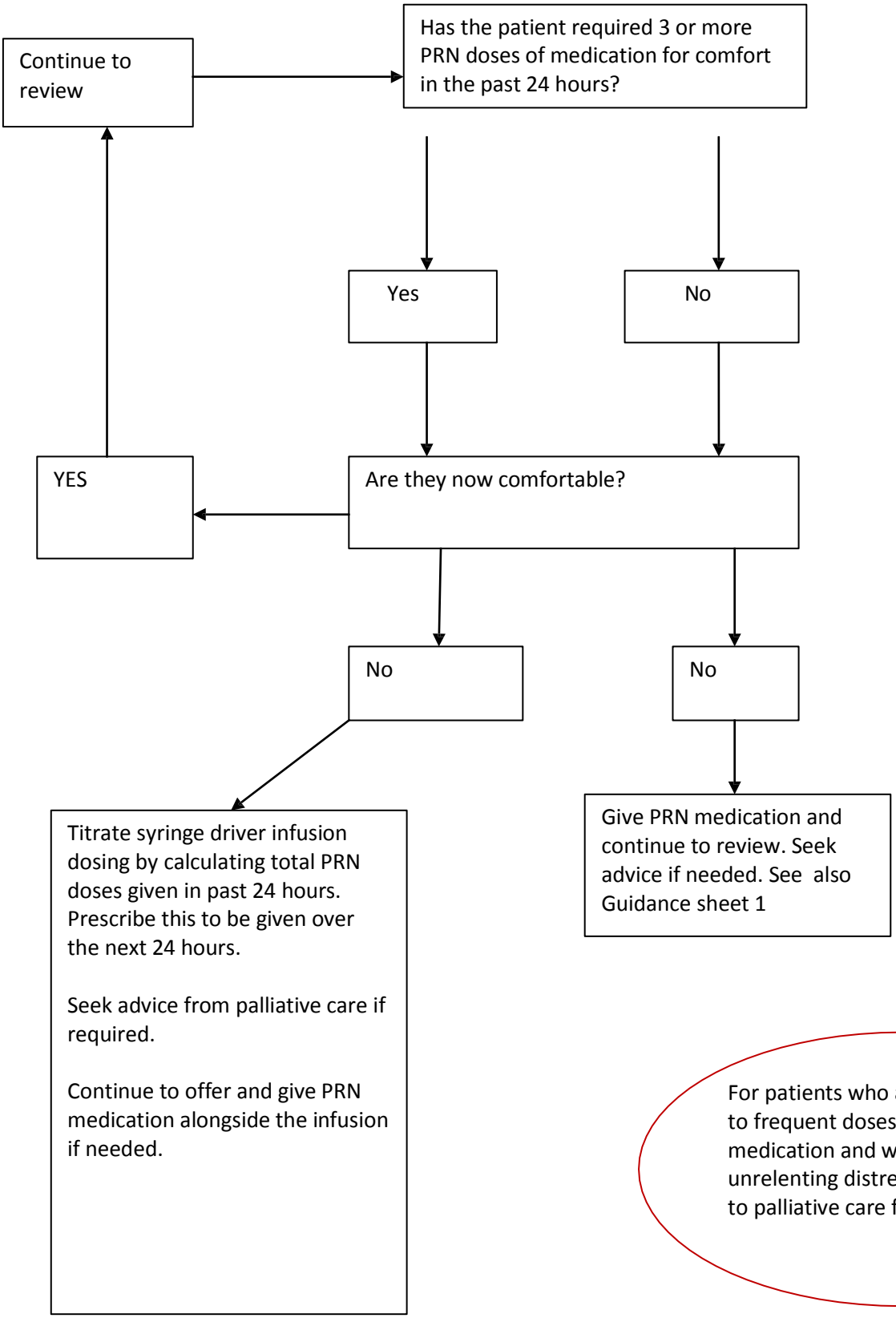
For patients who remain unsettled despite the above and who may need a continuous infusion of drugs see GUIDANCE SHEET 2 and /or speak to your hospital supportive and palliative care as below:

QEHB 14548
GHH 42442
GHH 47316
Solihull 44127

GUIDANCE SHEET 2

SYRINGE DRIVER GUIDANCE FOR CORONAVIRUS PATIENTS BEING CARED FOR OUTSIDE OF CRITICAL CARE AND WHO ARE AT RISK OF DYING IMMINENTLY

DOES MY PATIENT NEED A SYRINGE DRIVER INFUSION?



For patients who are not responding to frequent doses of PRN medication and who show unrelenting distress ring and speak to palliative care for advice