Prescribing Guidance for Dying Patients

Severn Hospice

Most patients are comforted by the knowledge that medication is helpful and available if required at the end of their life.

The following flow charts are to be used as a guide for patients in their last hours of life. Further information is available from the West Midlands Palliative Care Physicians "Guidelines for the use of drugs in symptom control" www.wmpcg.co.uk and the Palliative Care Formulary.

PAIN AT THE END OF LIFE

Is patient already on opioid drugs and unable to tolerate or absorb oral medication?

YES

Patient on MR Morphine/Oramorph

- Divide 24 hour total dose of current **oral** Morphine by 3 and prescribe this as Diamorphine (mgs) via syringe pump over 24 hours
- Prescribe 1/6th Diamorphine syringe pump dose for breakthrough/rescue medication to be given hourly if needed
- Start syringe pump 4 hours before next oral opioid dose would have been due
- Discontinue oral opioid

Review within 24 hours
If extra medication has been needed for pain:

- Increase syringe pump dose by total amount of rescue Diamorphine given or by 50% whichever is less
- Adjust rescue/breakthrough dose to 1/6th of syringe pump Diamorphine dose to be given hourly if needed

If pain is controlled, make **NO** changes
Continue to review dose requirements regularly

Patient on weak opioid
(Codeine, Tramadol, Dihydrocodeine)

- Stop oral weak opioid
- Start Diamorphine 10mg/24 hrs by syringe pump soon after last oral dose
- Prescribe Diamorphine 2.5mg sub-cut hourly if needed for rescue/ breakthrough pain

Review regularly and adjust as above

Fentanyl patch: continue patch and supplement with sc Diamorphine prn and add in a syringe pump **if** needed.
Renal impairment: GFR < 30 seek advice

NO

Scenario 1: "planning ahead"
Patient not in pain

- Prescribe Diamorphine 2.5mg - 5mg sub-cut hourly if needed
- If patient later develops pain, proceed to next box

Scenario 2: "act now"
Patient in pain

- Give Diamorphine 2.5mg sub-cut stat
- Prescribe and start Diamorphine 10mg/24h by syringe pump
- Prescribe Diamorphine 2.5mg sub-cut for rescue/breakthrough pain to be given hourly if needed

Review within 24 hours
If extra medication has been needed for pain:

- Increase syringe pump dose by total amount of rescue medication given or to 20mg/24hrs, whichever is less
- Increase rescue/breakthrough dose of Diamorphine to 5mg sub-cut to be given hourly if needed

If pain is controlled, make **NO** changes

Review within 24 hours
If extra medication has been needed for pain:

- Increase syringe pump dose by total amount of rescue Diamorphine given or by 50%, whichever is less
- Adjust rescue/breakthrough dose to 1/6th of syringe pump Diamorphine dose to be given hourly if needed

If pain is controlled, make **NO** changes
Continue to review dose requirements regularly

If symptoms persist or you need advice please contact the Medical or CNS Team at Severn Hospice.

NAUSEA AND/OR VOMITING AT THE END OF LIFE

Important note: this guidance applies to the end of life ONLY

Effective palliation of nausea and vomiting earlier in the illness requires a cause-specific approach

Patients entering the terminal phase with **good symptom control** from an oral anti-emetic should **continue the same drug** given via a syringe pump when they are unable to take oral medication.

Domperidone should be replaced by Metoclopramide and Prochlorperazine (stemetil) by Cyclizine.

For new symptoms of nausea/vomiting that are difficult to control Levomepromazine (Nozinan) is recommended because of it's broad spectrum of action.

Patient has new or uncontrolled nausea/vomiting

Give Levomepromazine 6.25mg sub-cut stat
(a once daily dose may be sufficient because of the long half life)
Also prescribe Levomepromazine 6.25mg sub-cut as needed
Dose may be repeated after 1 hr
If repeat dose needed, initiate syringe pump

In some settings, eg community, it may be appropriate to give a stat dose of Levomepromazine sub-cut AND start a syringe pump with Levomepromazine at the same time

Levomepromazine by syringe pump

- Start at 6.25mg - 12.5mg/24hrs

Patient has no nausea/vomiting OR n/v controlled on existing medication

Prescribe Levomepromazine 6.25mg sub-cut as needed in case nausea/vomiting become a problem in the terminal phase.
This can be repeated after 1 hr if needed

If 2 or more doses are needed in 24 hrs, start syringe pump with Levomepromazine 12.5mg/24hrs

Continue Levomepromazine 6.25mg sub-cut as needed, leaving 1 hr between doses (max 4 doses). If 1 or more extra doses needed in 24 hrs increase syringe pump to 25mg/24 hrs

If nausea and/or vomiting are not controlled adequately at any stage, contact palliative care team for advice

Levomepromazine doses above 25mg/24 hr has a sedative effect.

If symptoms persist or you need advice please contact the Medical or CNS Team at Severn Hospice.

RESTLESSNESS/AGITATION AT END OF LIFE

Consider and manage common causes of restlessness, **eg. Urinary retention, faecal impaction, hypoxia and pain.**

PATIENT IS RESTLESS/AGITATED

PATIENT IS NOT RESTLESS/AGITATED

Non-drug intervention is essential: reassurance, calm environment, use of sound and aromatherapy. Have you taken into account their spiritual needs?

Immediate management

Give medication sub-cut stat:
Midazolam 2.5 - 5mg
OR
Haloperidol 2.5mg
Start syringe pump:
Midazolam 10 - 20mg/24h
OR
Haloperidol 5mg/24h

Prescribe rescue doses sub-cut hourly:
Midazolam 2.5 - 5mg
AND/OR
Haloperidol 2.5mg

Review within 24 hours

Midazolam:
1-2 extra doses, increase driver dose by 50%,
3 or more extra doses, double driver dose
Continue rescue doses of 5mg sub-cut prn
If Midazolam driver dose>40mg/24hrs, consider Levomepromazine and seek advice.

Haloperidol:
Any extra doses, increase driver dose to 10mg/24h and continue rescue doses
Max haloperidol dose 20mg/24hrs

Midazolam and Haloperidol are very effective when used in combination

Planning ahead
Prescribe sub-cut hourly as needed
Either Midazolam 2.5mg
OR
Haloperidol 2.5mg

Review within 24 hrs
If 2 or more doses needed **and are effective,** start syringe pump of same drug (see left)

If 2 or more doses tried **but are not effective,** switch to the other drug or consider Levomepromazine (see below)

Persistent symptoms

Levomepromazine:

- Is an effective **sedative**
- It may be added to Midazolam (if Midazolam partly effective) or used to replace haloperidol.
- Start syringe pump at 25mg/24h
- Use rescue dose 12.5mg sub-cut hourly as needed

Higher doses are sometimes needed please discuss with the Drs or CNS at Severn Hospice if doses over 50mg/24hrs are used.

If symptoms persist or you need advice please contact the Medical or CNS Team at Severn Hospice.

RESPIRATORY TRACT SECRETIONS IN A DYING PATIENT

Dying patients may be unable to cough effectively or swallow, which can lead to retained secretions in the upper respiratory tract. There is little evidence to support the effectiveness of drug treatment for this symptom. If the patient appears comfortable and not distressed reassure relatives and staff.

Hyoscine Butylbromide is our drug of choice to use for respiratory tract secretions at end of life

Hyoscine Butylbromide is non-sedating; Note it does not mix well with Cyclizine in a syringe and blocks the prokinetic antiemetic action of Metoclopramide

If rattling breathing is associated with breathlessness in a semiconscious patient add in an opioid +/- an anxiolytic sedative (midazolam)

SECRETIONS PRESENT

General management

- **Give explanation and reassurance to relatives**
- Alter position to shift secretions
- Discontinue parenteral fluids
- Give hourly mouth care

Drug treatment:

Hyoscine Butylbromide 20mg s/c

Start syringe pump
Hyoscine Butylbromide 60mg/24hr CSCI

Allow rescue doses 2 hrly sub-cut as needed

Review after 24 hrs or sooner
If rescue doses needed, increase driver dose
Hyoscine Butylbromide 120mg/24hr CSCI

SECRETIONS ABSENT

Planning Ahead
Patients may develop respiratory tract secretions

Prescribe Hyoscine Butylbromide 20mg sub-cut 2 hourly as needed

Review after 24hrs or sooner
If 2 or more doses needed, manage as for "secretions present"

Difficult cases
In heart failure, pulmonary oedema may cause a rattle. Consider furosemide s/c
In persistent cases, **Glycopyrrolate** 200-400mcg sub-cut as stat doses should be used as second line

If symptoms persist or you need advice please contact the team at Severn Hospice.

BREATHLESSNESS AT END OF LIFE

Terminal breathlessness is very frightening and must be treated as a serious symptom, untreated it can lead to escalation of symptoms, distress and terminal agitation.

BREATHLESSNESS PRESENT

General measures

- Calm environment
- Reassurance and support
- Gentle air flow with fan (damp flannel around mouth)
- Cool room
- Give hourly mouth care
- Oxygen if helpful/Hypoxic

Use of medication:

Patient not on opioid for pain

- Give Diamorphine 2.5mg sub-cut stat
- Prescribe hourly as needed for rescue dose
- Start Diamorphine 10mg/24hrs by syringe pump

Patient on MR Morphine/Oramorph

- Divide 24 hour total dose of current **oral** Morphine by 3 and prescribe this as Diamorphine (mgs) via syringe pump over 24 hours
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- Start syringe pump 4 hours before next oral opioid dose would have been due
- Discontinue oral opioid

(The above mimics pain flow chart above – if in pain and breathless DO NOT double doses)

Consider the following:

If anxiety continues

- Midazolam 2.5-5mg prn

If bronchospasm a significant factor

- Add in inhaler/nebs/steroids

If Pulmonary Oedema

- Furosemide (can be used s/c)

RISK OF BREATHLESSNESS

Planning ahead

Patient not on opioid for pain

Prescribe Diamorphine 2.5mg sub-cut hourly if needed

Consider Midazolam 2.5mg sub-cut hourly if anxiety likely to occur

Review within 24hrs

If 2 or more doses needed, manage as for breathless patient

Review within 24hrs

If >2 rescue doses needed in 24hrs,

- Increase the medication in the syringe driver
- A combination of Diamorphine and Midazolam may be needed.
- Continue rescue doses hourly as needed

Increase rescue dose of chosen drug to 5mg and continue hourly as needed

Continue to review regularly.
Modify syringe pump doses as needed, guided by rescue medication used.

DO NOT STRUGGLE – SEEK HELP

If symptoms persist or you need advice please contact the team at Severn Hospice.