

COVID-19 Pandemic Palliative Sedation Guideline
Freeman Centre for the Advancement of Palliative Care

The Palliative Sedation Guideline is to be used across the organization during a COVID-19 pandemic situation when the goal is to achieve deep sedation quickly for intractable symptoms at the end of life. It provides options for medications to be used for palliative sedation in the event of drug shortages. Due to the limited availability of Computerized Ambulatory Drug Delivery (CADD) pumps, the use of continuous subcutaneous Midazolam was not included in this guideline but is outlined in Policy XV-150 (Refer to Policy - Computerized Ambulatory Drug Delivery- Patient Controlled Analgesia (CADD) Midazolam for Palliative Sedation Therapy).

**** Palliative Sedation is intended for use alongside consultation with the palliative care team either by phone or in person.****

DEFINITION

Palliative Sedation is the intentional lowering of consciousness within the last one to two weeks of life. It involves the use of sedative medications to relieve suffering secondary to intractable symptoms after all appropriate interventions have failed. It is a treatment of last resort. The aim is to provide comfort and relieve suffering and not to hasten death.

CRITERIA

- The presence of refractory/intractable symptoms after all appropriate interventions have failed. See Appendix A for “Respiratory Distress and symptom management for adult patients with COVID-19 receiving end-of-life supportive care outside of the ICU.”
- Patient is expected to die from COVID-19
- Do not resuscitate (DNR) order established
- Patient/family goals for a comfort measures only approach to care obtained and documented (if the patient has an implanted defibrillator it must be inactivated)
- Informed consent from patient or substitute decision maker (SDM) obtained and documented

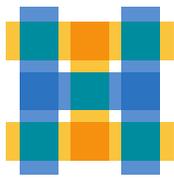
MEDICATIONS

Medication supply during pandemic is fluid and subject to change.

Note: *Do not discontinue opioids. Rotate to subcutaneous route if available.
*Before ordering the palliative sedation protocol below, discontinue overlapping medications from the patient’s orders profile (e.g. existing orders for benzodiazepines, phenobarbital, and/or methotrimeprazine).

A. Protocol using Phenobarbital

1. a) Initiate sedation with midazolam (optimal choice):
 - I.For frail elderly: midazolam 2.5 mg SC ONCE NOW
 - II.For non-frail adult: midazolam 5 mg SC ONCE NOW



- b) Initiate sedation with lorazepam (if midazolam unavailable): lorazepam 2 mg SC ONCE NOW
2. Initiate maintenance phenobarbital with NOW dose of midazolam or lorazepam:
 - a) For patients 55 kg or below, and/or frail elderly: phenobarbital 90 mg SC q8h
 - b) Patients over 55 kg: phenobarbital 120 mg SC q8h
3. If the patient is not sedated give breakthrough phenobarbital 60 mg SC q1h PRN until the patient is sedated. Call MRP after giving first breakthrough dose for maintenance phenobarbital dosing adjustment. PRN phenobarbital dose may also be increased as necessary to ensure sedation.

To conserve medications when prescribing, please round UP the closest ampule size. Phenobarbital is supplied in single 1 millilitre ampules of 30 mg/mL and 120 mg/mL concentrations and unused medication in an ampule is wasted. For example, increasing dosage from phenobarbital 120 mg SC q8h to 150 mg SC q8h, or increasing frequency to phenobarbital 120 mg SC q6h. Dosing schedule can range from q4h-q8h.

4. May add methotrimeprazine 25 mg SC q8h-q12h as an adjuvant for symptom management.

B. Protocol using Lorazepam and Methotrimeprazine (if no phenobarbital or midazolam available)

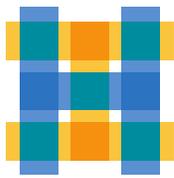
1. Initiate sedation with lorazepam 2 mg SC ONCE NOW
2. Start methotrimeprazine 25 mg SC q12h with NOW dose of lorazepam.
3. Initiate maintenance lorazepam 2 mg SC q4h (for patients on chronic benzodiazepines you may want higher dose. Suggest increasing the dose by 50%, e.g. lorazepam 3 mg SC q4h).
4. If the patient is not sedated give breakthrough lorazepam 2 mg SC q30min PRN until the patient is sedated. Call MRP after giving first breakthrough dose to adjust lorazepam maintenance dose or methotrimeprazine frequency. PRN lorazepam dose may also be increased as necessary to ensure sedation.

C. Protocol using Methotrimeprazine (if shortage of benzodiazepines or phenobarbital)

1.
 - a) Initiate sedation with midazolam (optimal choice):
 - I. For frail elderly: midazolam 2.5 mg SC ONCE NOW
 - II. For non-frail adult: midazolam 5 mg SC ONCE NOW
 - b) Initiate sedation with lorazepam (if midazolam unavailable): lorazepam 2 mg SC ONCE NOW
2. Start maintenance methotrimeprazine 25 mg SC q6h with initiation dose of benzodiazepine (lorazepam or midazolam).
3. If the patient is not sedated give breakthrough methotrimeprazine 25 mg SC q2h PRN until the patient is sedated. Call MRP after giving first breakthrough dose for maintenance methotrimeprazine dosing adjustment. PRN methotrimeprazine dose may also be increased as necessary to ensure sedation.

ORDERS

- Discontinue vital signs



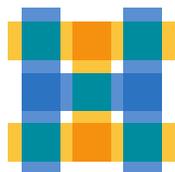
- Oxygen Therapy: Oxygen by nasal prongs or face mask PRN for comfort (initiate if patient is restless or has laboured breathing). Do not check/titrate to SpO₂.
- Comfort checks
- Consider order for Urinary catheterization
- Mouth and eye care protocols as needed
- Insert subcutaneous line

REMINDERS

- Before ordering the palliative sedation protocol, discontinue overlapping medications from the patient's orders profile (e.g. existing orders for benzodiazepines, phenobarbital, and/or methotrimeprazine).
- Deactivate defibrillator if present (may need to tape on magnet).

NURSING PROCEDURE

1. Insert subcutaneous line(s) for medication administration. Refer to Policy XV-85: Insertion of a Subcutaneous Line for Injection, Palliative Sedation and Hypodermoclysis. For intermittent subcutaneous medications the maximum volume administered at each injection site is 2 mL (excluding flush). Higher dosages of medications that exceed 2 mL will require the injection to be divided and given into 2 subcutaneous lines.
2. The nurse will assess the patient's level of sedation (either sedated or not sedated) and document under iView once a shift and PRN. Refer to Appendix B for Nursing Cheat Sheet.
3. If the patient is not sedated the nurse will administer PRN sedative medication as ordered.
4. The nurse will monitor for the presence of other symptoms such as pain using the Adult Faces Pain Scale (see Appendix C) and/or upper respiratory secretions, and give the appropriate PRN medications (e.g. opioids and anticholinergics).



APPENDIX A



Respiratory Distress and symptom management for adult patients with COVID-19 receiving end-of-life supportive care outside of the ICU

adapted with permission from BC Centre for Palliative Care Guidelines*

**BEFORE enacting these recommendations
PLEASE identify patient's GOALS OF CARE**

These recommendations are consistent with: DNR, no ICU transfer and comfort-focused care in Hospital, LTC or Home with no hospital transfer

Suggested tools to assist with conversation: COVID-19 Conversation Tips (<http://bit.ly/SeattleVitaTalkCOVID19>) Serious Illness Conversation Guide (<http://bit.ly/SeriousIllnessConversationGuide>) Communicating Serious News (UpToDate; requires login <http://bit.ly/CommunicatingSeriousNews>)

All below are STARTING doses. COVID-19 symptoms may advance quickly. Be prepared to escalate dosing. Consider dose ranges to give frontline staff capacity for urgent clinical decision-making as needed.

Patient NOT already taking opioids ("opioid-naive")

Opioids

All relieve dyspnea & can be helpful for cough

Begin at low end of range for frail elderly

Start with PRN but low threshold to Advance to q4h scheduled dosing

MORPHINE

2.5-5 mg PO OR 1-2 mg SC/IV q1h PRN (SC/IV can be q30min PRN)
If >3 PRN in 24h, MD to review

HYDROMORPHONE

0.5-1 mg PO OR 0.25-0.5 mg SC/IV q1h PRN (SC/IV can be q30min PRN)
If >3 PRN in 24h, MD to review

TITRATE UP AS NEEDED

If using > 3 PRN in 24h, consider q4h scheduled dosing and continue q1h PRN dosing (Consider q6h dosing for frail elderly or for renal impairment)

Evidence supports that appropriate opioid doses do not hasten death in conditions like COPD or advanced cancer; reassess dosing as patient's condition or level of intervention changes

Also Consider:

Laxatives e.g. PEG/sennosides
Antinauseants e.g. metoclopramide/haloperidol

Patient already taking opioids

**Continue previous opioid
Consider increasing by 25%
*SC/IV dose is 1/2 PO dose***

To manage breakthrough symptoms:
Start opioid PRN at 10% of total daily (24h) opioid dose

Give PRN: q1h if PO, q30min if SC

For further assistance including telephone support, please contact your local palliative care consultant.

**Respiratory Secretions/
Congestion near end-of-life**

Advise family & bedside staff: not usually uncomfortable, just noisy due to patient weakness / not able to clear secretions

Consider:

GLYCOPYRROLATE:
0.4 mg SC q2 - q4h PRN

SCOPOLAMINE:
0.4-0.6 mg SC q4h PRN

ATROPINE 1% OPHTHALMIC DROPS:
3-6 drops SL/buccal q4h PRN

TRANSDERM V PATCH:
1 patch behind each ear q72h PRN

For All Patients:
Opioids are the mainstay of dyspnea management.

The following medications are helpful adjuncts for dyspnea/agitation:

LORazepam
0.5-2 mg SL/SC q1h PRN
If >3 PRN in 24h, MD to review
Consider q4-12h regular dosing. Continue PRN dosing

MIDAZOLAM
1-5 mg SL/SC q30min PRN
If >3 PRN in 24h, MD to review
Consider q4h regular dosing or continuous infusion if available

Note: In frail elderly, consider adding antipsychotic to prevent benzodiazepine induced agitation

For Agitation/Restlessness:

HALOPERIDOL
0.5-1 mg PO/SC q2h PRN
If >3 PRN in 24h, MD to review
Consider regular dosing

METHOTRIMEPRAZINE
6.25-12.5 mg PO/SC q2h PRN
If >3 PRN in 24h, MD to review
Consider regular dosing

**Grief and bereavement support:
Consider involving support from:
SW, spiritual care, chaplaincy**

Please note Transderm V is non-formulary at NYGH

Engage with your team to ensure comfort is the priority as patients approach end-of-life. Please ensure written orders reflect this. Unmanaged symptoms at time of death will add to distress of patients, family members and bedside staff. Please insert SC line when needed and discontinue non-essential medications. Hydration may worsen symptoms of dyspnea and may need to be discontinued. These recommendations are for reference and do not supersede clinical judgement. We have attempted to decrease complexity to allow barrier-free use in multiple settings. Recommendations compiled collaboratively with input from BC guidelines, Baycrest Palliative Care Team and NYGH Freeman Centre for the Advancement of Palliative Care. Version: 2020 Apr 16. Please direct questions or feedback to Dr. Daphna Grossman at Daphna.Grossman@nygh.on.ca
NYGH MAC Approval: April 2020

APPENDIX B

**COVID-19 Pandemic: Palliative Sedation
Nursing Cheat Sheet**

The **goal** of palliative sedation is to have the patient sedated in order to manage severe refractory symptoms at the end of life. When the patient is sedated they will have no response to voice and little to no movement to physical stimulation.

****** When the patient is sedated, please **DO NOT** hold scheduled medications******

Assessment

- Assess level of sedation either “not sedated” or “sedated”

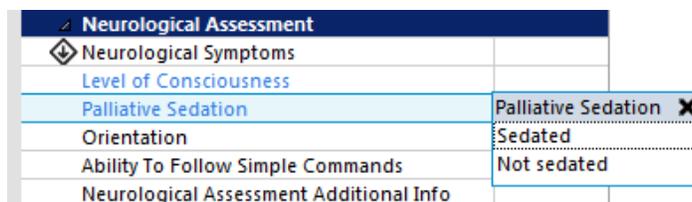
Not sedated	Sedated
Patient removing clothes	Sleeping
Patient moaning	No moaning
Agitation/Restlessness	No agitated movements
Behavioral signs of distress (e.g. grimacing)	No response to voice
	No response to physical stimulus

Subcutaneous Lines

- The maximum volume administered at each injection site is 2 mL (excluding flush).
- Medications that exceed 2 mL will require the injection to be divided and given into **two** subcutaneous lines
- Flush with 0.5 mL 0.9% sodium chloride (Normal Saline) after medication administration

Documentation

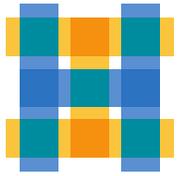
- Document patient’s level of sedation under Palliative Sedation qshift and PRN
 - General Shift Assessment > Neurological Assessment > Palliative Sedation



APPENDIX C

Adult Faces Pain Scale





REFERENCES

1. BC Centre for Palliative Care (2019). B.C. Inter-professional Palliative Symptom Management Guidelines. Accessed from <https://bc-cpc.ca/cpc/wp-content/uploads/2019/10/SMG-Interactive-Oct-16-2019.pdf>
2. Care Beyond Cure. Management of Pain and Other Symptoms. Hospital Pharmacists' Special Interest Group in Palliative Care, 4th edition, 2009. Association des pharmaciens des établissements de santé du Québec
3. Dean, M. M., Cellarius, V., Henry, B., Oneschuk, D., & Librach, S. L. (2012). Framework for continuous palliative sedation therapy in Canada. *Journal of palliative medicine*, 15(8), 870-879.
4. North York General Hospital, Policies and Procedures. (2020). Computerized Ambulatory Drug Delivery- Patient Controlled Analgesia (CADD) Midazolam for Palliative Sedation Therapy, Policy XV-150
5. North York General Hospital, Policies and Procedures. (2019). Insertion of a Subcutaneous Line for Injection, Palliative Sedation and Hypodermoclysis, Policy XV-85
6. Sessler, C.N., Gosnell, M., Grap, M.J., Brophy, G.T., O'Neal, P.V., Keane, K.A et al. (2002). The Richmond Agitation Sedation Scale: Validity and reliability in adult intensive care patients. *American Journal of Respiratory and Critical Care Medicine*. 166, 1338-1344.
7. Twycross, R., Wilcock, A., & Howard, P. (Eds.). (2015). *Palliative care formulary*. Palliativedrugs.com
8. University Health Network, Policy and Procedure Manual. (2009). Palliative Care - Palliative Sedation (Policy No. 56.10.002).