

**COVID-19 SPECIFIC QUICK TIPS: PALLIATIVE SEDATION THERAPY (PST)**

**\*\*Palliative care consultation (even by phone) is highly recommended\*\***

**Definition:** Process of inducing and maintaining deep sleep, in the final hours to days of life, for the relief of severe suffering caused by one or more refractory symptoms when all appropriate alternative interventions have failed to bring adequate symptom relief.

**Palliative Sedation is not equivalent to Medical Assistance in Dying or Euthanasia.**

**Criteria:** (Document that these criteria are met)

- Presence of a progressive incurable life-limiting illness causing severe suffering to a patient in the final hours to days of life
- Refractory symptom is present (or the expectation is that the patient will develop refractory symptoms as technology is weaned) if:
  1. All symptom treatment options exhausted without adequate relief; AND
  2. Further alternative options would not be effective in time; OR side-effects or burdens of alternative option are not tolerable to the patient
- Goals of Care designation C2, on Care of the Imminently Dying Pathway (in Connect Care: C2 Medication and Care, Adult - All Locations order set) – see <https://www.albertahealthservices.ca/frm-21200.pdf>
- Patient/Alternate Decision Maker (if patient lacks capacity) consents to procedure following thorough discussions with Most Responsible Health Provider (and other team members when available)
- Ensure psychosocial supports are in place for both the patients/families and care teams

**Clinical Considerations:** (For Nursing Considerations see COVID-19 QUICK TIPS: PALLIATIVE SEDATION THERAPY (PST) NURSING CONSIDERATIONS)

- Please considering consulting a palliative care physician prior to initiating palliative sedation
- Review current medications, and discontinue non-essential medications in keeping with C2 level of care
- DO NOT stop current medications for symptom relief as they will still be needed for optimal comfort (e.g., opioids for pain or dyspnea)
- Change all necessary medications to non-oral routes (may possibly need to use sublingual or buccal, keeping in mind transmission risk)
- **Opioids are not appropriate for inducing PST**
- Most common medication classes used for PST are benzodiazepines, neuroleptics, or barbiturates. Choices may depend on the expertise of the prescribing physician, medication availability, and the care setting
- Preferred pharmacological agent is midazolam to achieve adequate sedation for a patient in respiratory distress.
- For patient with severe dyspnea, as might be expected with severe COVID 19 pneumonia, level of sedation should render the patient unresponsive to stimuli (RASS of -5; see below).
- Ensure psychosocial support in place, as available in your setting

**Discussion Points with Patient/Family:**

*What is Palliative Sedation?* “Palliative sedation means using medications to help a person be in an unconscious state so that she/he is unaware of what is happening to their body as it is shutting down, when we have tried all of the different ways available to us to relieve the symptoms causing the patient to suffer.”

*Palliative sedation is NOT:* “Palliative sedation is NOT euthanasia/Medical Assistance in Dying. There is no evidence that palliative sedation shortens life; we do not want to shorten life, but rather to provide comfort. We aim not to “shorten the road” but rather “smooth the bumps in the road.”

*What can you expect?* “We will use medication regularly or continuously in order to make the patient unaware of the body shutting down. We aim to do this as quickly as possible but sometimes it takes a little bit of time to get the right dose. When someone undergoes palliative sedation, it is unlikely that she/he will be able to have any meaningful interactions with family members. As much as possible, try to talk about the things that are important to you before we start the sedation.”

**Richmond Agitation Sedation Scale (RASS) \***

Score	Term	Description	
+4	Combative	Overtly combative, violent, immediate danger to staff	
+3	Very agitated	Pulls or removes tube(s) or catheter(s); aggressive	
+2	Agitated	Frequent non-purposeful movement, fights ventilator	
+1	Restless	Anxious, apprehensive but movements not aggressive or vigorous	
0	Alert and calm		
-1	Drowsy	Not fully alert, but has sustained awakening to voice (eye-opening/eye contact $\geq$ 10 seconds)	} Verbal Stimulation
-2	Light sedation	Briefly awakens to voice (eye-opening/eye contact <10 seconds)	
-3	Moderate sedation	Movement or eye opening to voice (but no eye contact)	
-4	Deep sedation	No response to voice, but movement or eye opening to physical stimulation	} Physical Stimulation
-5	Unarousable	No response to voice or physical stimulation	

**Medication:**

- Please consider consulting a palliative care physician prior to initiating palliative sedation
- Please note that this document is specific to COVID-19 and therefore drug dosages may differ from the Provincial Clinical Knowledge Topic and Order Set on Palliative Sedation, Adult
- Preferred pharmacological agent is midazolam to achieve adequate sedation for a patient in respiratory distress.
- For patient with severe dyspnea, as might be expected with severe COVID 19 pneumonia, level of sedation should render the patient unresponsive to stimuli (RASS of -5; see page 1).

Drug name	Bolus dose	Titration	Maintenance dose and range	Notes
<b>MIDAZOLAM</b> Usually preferred medication for palliative sedation (as infusion)  Continuous subcutaneous or IV  Standard concentration is 100 mg in 100 ml Normal Saline (final concentration 1 mg/ml)	Bolus of 1 to 5mg subcut/IV  May need to repeat this dose q30 mins PRN if more rapid symptom control required while titrating infusion Use lower end of range in frail elderly	Infusion: titrate up by 0.5-1mg every 10-30 minutes Start with a low dose infusion e.g., 1 or 2mg/hr and titrate up as needed, especially with elderly and/or low weight patients	1 to 20 mg/h infusion <b>*Intermittent dosing is not recommended due to the short half-life, but may be considered to bridge until infusion is ready</b>	Agitation is a rare complication (paradoxical reaction).
<b>METHOTRIMEPRAZINE</b> For community patients, when medication pumps, or continuous midazolam infusion not available Intermittent subcutaneous or IV	Bolus not required	25 to 37.5mg every hour as needed until deeply sedated, then use maintenance dosing Use lower end of range in frail elderly	25 up to 37.5 mg Q4H ATC and 12.5 up to 50mg q1H prn (dosing depends on patient's reaction; lower end of range for frail elderly) (Up to 250mg/24Hr)	Paradoxical agitation, while uncommon, may occur; monitor for extrapyramidal side effects; lowers seizure threshold
<b>PHENOBARBITAL</b> Covered by Palliative Blue Cross during COVID-19  Deep subcutaneous intermittent dosing or IV  May use continuous subcutaneous infusion – less tissue necrosis and burning.	Bolus of 1 to 3mg/kg  Use lower end of range in frail elderly	Very long half-life (53-118 hrs), thus difficult to titrate  Intermittent: 30 up to 120mg subcut/IV Q12H or Q8h (Use lower end of range in frail elderly)  Infusion: 0.5 mg/kg/hr subcut/IV not to exceed 2500 mg/24 h	50 to 100mg/h as subcut/IV infusion	This could be used as alternative for patients with paradoxical reaction to midazolam.
<b>LORAZEPAM</b> Not usually used for PST, however might be useful for community patients when medication pumps, or continuous midazolam infusion not available  Subcutaneous intermittent  COVID-19: SL and buccal might increase risk of inadvertent exposure if administered by family members in the home setting	Start with STAT dose of 1-2mg subcut/IV (or 1mg to 4mg sublingual)	Titrate with intermittent doses of 0.5mg to 2 mg subcut/IV/SL every 30 min until deeply sedated, then use maintenance dosing	1 to 4 mg subcut/ IV (1 mg up to 8 mg SL) q2 up to q4h ATC and 1 or 2 mg subcut/IV/po q1 h prn  Usual dose is 4 to 40 mg per day.	Volume may limit high subcut dosing.  Lorazepam is best avoided for infusion due to risk of precipitation

**References:**

**Provincial Clinical Knowledge Topic Palliative Sedation, Adult – All Locations V 1.0**

<https://extranet.ahsnet.ca/teams/policydocuments/1/klink/et-klink-ckv-palliative-sedation-adult-all-locations.pdf>

**BC Centre For Palliative Care Symptom Guidelines – Refractory Symptoms**

<https://www.bc-cpc.ca/cpc/wp-content/uploads/2019/06/17-RefractorySymptomsAndPalliativeSedationGreyscalePrint.pdf>

**McMaster Dept of Family Med. Continuous Palliative Sedation Therapy (CPST) Protocol for Covid-19 Pandemic**