



Palliative Pearls

Brought to you by the JBMH Outpatient Palliative Care Clinic

Palliative Pearls: Terminal Sedation in the Palliative Care Setting

Definition:

Palliative or terminal sedation: is the use of pharmacological intervention intended to induce or maintain sedation (deep sleep) to reduce the palliative patient's awareness of distressing and refractory symptoms.

Refractory symptoms: occur when symptoms are not adequately controlled despite aggressive efforts to identify a tolerable therapy, that does not compromise consciousness and no methods are available for palliation within a tolerable timeframe (Michaud, 2004, CANO conference)

Purpose:

The purpose of terminal sedation is to reduce patient awareness of distressing symptoms when all other possible interventions have failed, and it is felt that the patient is close to death. All appropriate measures to optimally manage refractory symptoms should be reviewed and implemented prior to considering terminal sedation. The ultimate indication is relief of profound distress that cannot be alleviated by spiritual, psychological or other forms of intervention (Pharmacy Specialty Group on Palliative Care, 2000)

Ethical Considerations:

It is conceivable that sedation can shorten life, such as by reducing airway protective mechanisms. The ethical principle of "double effect" is utilized in this clinical situation. The principle of double effect distinguishes between the primary effect: to relieve suffering and distress from refractory symptoms, and the secondary foreseen effect of an unintended potential negative outcome (lack of airway protection; shortening of life). In the principle of double effect, the primary intent of relieving suffering outweighs the second unintentional effect of shortening life.

Terminal sedation is NOT euthanasia. The law recognizes the principle of double effect and places great emphasis on intent and respect for autonomy. Intent is made explicit through clear documentation and thorough communication with all involved.

When to consider Terminal Sedation:

- death is expected and appears to be imminent (within days)
- there is a DNR order in effect
- a thorough assessment (including history, physical exam and diagnostic interventions) has been conducted to identify and treat reversible causes
- all non-pharmacological approaches have been maximized such as imagery, relaxation techniques
- consultations to appropriate specialists including palliative have been made



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- all other pharmacological approaches have been maximized, such as appropriate titration of opioids for pain or dyspnea, and neuroleptics for delirium
- temporary sedation could be considered, such as in the case of a potentially reversible delirium, while awaiting the outcome of an intervention aimed at reversal
- the goals of sedation have been explained and understood by the patient and/or their family (informed consent) The patient and family are aware that terminal sedation is not euthanasia or physician assisted suicide, but are aware it may shorten life
- a consensus has been reached to initiate sedation as a result of these discussions
- a plan of care and goal for sedation has been established and criteria to measure the goal have been agreed on and clearly documented
- sedation may be planned in a predicted emergency situation, such as a catastrophic bleed. This needs to be planned for and the outcome of the decisions need to be clearly documented

Medications used for Terminal Sedation:

- **Midazolam** is drug of choice: rapid onset of effect, ease of titration, short half-life (easy reversal if needed), anticonvulsant activity, amnesic effect
- **Methotrimeprazine** (Nozinan) has been used s/c
- **Phenobarbital**: benefit is sedation and anti-convulsant, long half-life
- **Pentobarbital**: comes in suppository, could be used in home setting (both Phenobarbital and pentobarbital are not commonly used due to the severity of respiratory and circulatory suppression and rapid tolerance)
- **Propofol**:
 - Well tolerated
 - Has significant anti-emetic properties
 - Short duration of effect, rapid onset
 - Expensive
 - Need large vein to avoid venous irritation

Use of Midazolam:

- Need to have an intravenous or subcutaneous continuous infusion
- Start with a loading dose: 2.5-5.0 mg if severe agitation
- Start infusion at 1mg/hour sc and titrate up every 10 minutes until patient is sleepy/sedated
- The usual range is between 1.0-10mg/hour
- Once deep sedation is induced, titrate to lowest effective dose to maintain the goal of sedation
- *Reassess frequently!*

General Care Guidelines:

- ✓ Order for a foley catheter with the sedation order
- ✓ Reassess benefit of all other medications, ensure all other medications are ordered in sc or rectal route
- ✓ Optimize the environment:
 - Decrease tactile stimulation, turning and positioning (consider pressure relief surface)
 - Recommend a quiet and peaceful environment
 - Frequent mouthcare

References available on request: Ildico Tettero APN ext 5743