Palliative sedation

Author: Nathan Cherny, MD
Section Editor: Thomas J Smith, MD, FACP, FASCO, FAAHPM
Deputy Editor: Jane Givens, MD

All topics are updated as new evidence becomes available and our peer review process is complete. Literature review current through: Jan 2019. | This topic last updated: Sep 15, 2017.

INTRODUCTION — Palliative sedation is a measure of last resort used at the end of life to relieve severe and refractory symptoms. It is performed by the administration of sedative medications in monitored settings and is aimed at inducing a state of decreased awareness or absent awareness (unconsciousness). The intent of palliative sedation is to relieve the burden of otherwise intolerable suffering for terminally ill patients and to do so in such a manner so as to preserve the moral sensibilities of the patient, medical professionals involved in his or her care, and concerned family and friends [1].

This topic will review the indications and administration of palliative sedation in patients nearing the end of life, as well as special applications of palliative sedation in other palliative care settings, such as in emergency situations, for respite, and for psychological distress. Other aspects of symptom care in the palliative setting are covered separately. (See "Overview of managing common non-pain symptoms in palliative care".)

INDICATIONS — Palliative sedation may be utilized in both adults and children [2-6] with advanced incurable (ie, terminal) illness in order to alleviate severe symptoms that are refractory to other forms of treatment. It is most commonly utilized for the treatment of refractory pain, dyspnea, agitated delirium, and convulsions. However, there is much variability in the use definition of “refractory” symptoms, and thus, in the prevalence of use of palliative sedation (table 1) [7].

Some emergency situations for which palliative sedation could be considered may include massive hemorrhage, asphyxiation, an overwhelming pain crisis, and severe terminal dyspnea [8-10]. (See 'Emergency sedation' below.)

Still, other than in emergency situations, intermittent or mild sedation should generally be attempted before palliative sedation. For some patients, a state of "conscious sedation", in which the ability to respond to verbal stimuli is retained, may provide adequate relief without total loss of interactive function.

Defining refractory symptoms — A symptom is considered "refractory" when it cannot adequately be
controlled by therapies that do not seriously compromise consciousness. The diagnostic criteria for "refractoriness" are based on the clinician’s determination that further invasive and noninvasive interventions meet any of the following [1]:

- Incapable of providing adequate relief,
- Associated with excessive and intolerable acute or chronic adverse effects, or
- Unlikely to provide relief within a tolerable time frame.

A refractory symptom may also be defined as one that is associated with intolerable suffering on the part of the patient.

CONCERNS OF STAFF AND FAMILY — Witnessing or just considering palliative sedation can be profoundly distressing to family and staff. This is particularly true if there is concern regarding the effects and ethics of palliative sedation, lingering disagreement regarding the treatment plan among providers, and in situations where the process is protracted.

Are we hastening death? — Multiple studies have attempted to measure the impact of palliative sedation on patient survival, and their overall conclusion is that survival is the same (or even better) when sedated patients are compared to non-sedated patients [11-18]. These studies, while important, share methodological limitations that detract from the certainty of their conclusions: they are all cohort studies, most did not incorporate cohort matching for prognostic factors, and many did not detail the degree of sedation in the intervention arm.

Other ethical concerns — Some family members and staff may be concerned that palliative sedation is a form of euthanasia. (See "Physician-assisted dying: Understanding, evaluating, and responding to requests for medical aid in dying", section on 'Defining and describing practices'.)

The discussion of ethical issues with family and care team members should address the distinction from euthanasia. Palliative sedation is distinct from euthanasia in that euthanasia refers to the deliberate termination of the life of a patient by active intervention, usually at the request of the patient (voluntary active euthanasia [VAE]). Palliative sedation, in contrast, is utilized for refractory suffering and the intent of the intervention is to provide symptom relief, not expressly to end the life of the suffering patient [19-26].

Discussions with family members should emphasize that uncontrolled suffering at the end of life constitutes a critical situation and that the option of palliative sedation, after obtaining informed consent by the patient (or his or her surrogate) or by previously determined advance directives, constitutes a proportionate and effective response to suffering that is within accepted medical guidelines and supported by the principles of patient autonomy and self-determination. In this context, the decision to offer the use of sedation to relieve intolerable suffering to terminally ill patients presents no new ethical problem [27,28] and is supported by legal precedent [29-31]. (See 'Obtaining consent' below and "Ethical issues in palliative care", section on 'Palliative sedation'.)

Some authors assume that palliative sedation requires the concurrent discontinuation of nutrition and hydration [32-35]. Therefore, they argue that while palliative sedation for the relief of uncontrolled symptoms may be justifiable, it almost certainly hastens death by allowing for starvation and dehydration. However, it is important to reassert that the discontinuation of hydration and nutrition is not an essential element to the administration of sedation in the management of refractory symptoms [36]. (See 'The role of nutrition and hydration' below.)
**Ethically problematic practices** — Clinicians using palliative sedation need to be aware of the potential for harm from abusive, injudicious, or unskilled use of sedation. Potential harm is illustrated in the following examples:

- **Sedation as a means of hastening death** — This is the most common abuse of palliative sedation. It may occur by the deliberate use of deep sedation in patients who have no refractory symptoms, or in the deliberate use of doses that far exceed what is necessary to provide adequate comfort [19-26].

- **Sedation applied inappropriately** — Palliative sedation may be used for an inappropriate indication, due to inadequate patient assessment that may have overlooked a potentially reversible cause of distress [20,37]. For patients in whom palliative sedation is being considered, consultation with palliative care experts or a multidisciplinary team may help identify potential and available alternatives to palliative sedation [20,38].

- **Sedation given in response to the family’s (or others’) wishes and not in response to the patient him or herself (or his/her advance directives)** [39].

- **Sedation withheld when it is appropriate** — This may occur when clinicians rule out or do not offer the option of palliative sedation in favor of other therapeutic options that do not provide adequate relief. This may occur when anxiety about having to deal with all of the difficult discussions about sedation and end of life care results in continued futile therapeutic trials of ineffective therapies or when there are reservations based on undue concerns about potentially hastening death.

**Approach to the care team** — The care team should recognize the potential for staff distress [40]. All participating staff members need to understand the rationale for sedation and goals of care. Whenever possible this should be addressed at team meetings or case conferences, both before and after the event, to discuss the professional and emotional issues related to such decisions. Distress can be mitigated by fostering a culture of sensitivity to the emotional burdens involved in care, participating in the deliberative processes leading up to a treatment decision, sharing information, and engaging in multidisciplinary discussions that offer the group or individuals opportunities to express their feelings.

**Approach to the patient’s family and friends** — Palliative sedation can be a welcomed method to assure patient comfort, but can also be profoundly distressing to the patient’s family members and/or friends. A few principles are useful when considering the approach to a patient’s loved ones:

- They should be allowed and encouraged to be with the patient. In many situations an opportunity to say good-bye is of critical importance.

- They often need repeated reassurance that other methods have been sufficiently tried and/or carefully considered but were ineffective and that sedation is unlikely to shorten the patient’s life. The conversation should also emphasize the importance of comfort and our obligation to prevent or alleviate suffering.

- They should be kept informed about the patient’s well-being and what to expect.

- The care team must provide supportive care to the members of the patient’s family and/or friends. This includes listening to their concerns, attention to grief and physical/psychological burdens, and awareness for any perceived feelings of guilt. In addition, they should be offered advice as to ways to be of help to the patient (eg, by being with, talking to, and touching the patient, providing mouth care, and managing...
the atmosphere of the patient’s care).

- The care team should provide regular information updates to the family including information about the patient’s condition, degree of suffering, anticipated changes, or, when appropriate, notification that death is approaching and what can be expected in the dying process.

- After the death of the patient, the family should be offered the opportunity to meet with his or her care providers to give them the opportunity to ventilate grief and to discuss any outstanding concerns that they may harbor about the care delivered in the last days of life. (See "Palliative care: The last hours and days of life", section on 'Preparing the family for the dying process'.)

**PROCESS**

**Patient assessment** — Palliative sedation may be discussed as a component of a “goals of care” discussion when death is not imminent but a patient with advanced illness is at risk of intolerable suffering, and the clinician anticipates a potential need for it in the future. The discussion of this option should include review of the aims, benefits, and risks of palliative sedation, as well as the alternatives to its use. (See "Discussing goals of care"). However, most often the discussion about palliative sedation takes place because of a symptom crisis.

Terminally ill patients suffering from severe distress should be evaluated urgently, preferably by a palliative care clinician. This evaluation is to determine whether reversible (or treatable) factors may be playing a role in the patient’s deterioration or severe distress (eg, acute bowel obstruction, elevated intracranial pressure, or a previously undiagnosed pulmonary infection). In addition, this allows for a re-evaluation of the patient’s prognosis, which is essential in order to allow for the discussion of appropriate therapy.

In general, if palliative sedation is under consideration, review of the case by a multidisciplinary team (eg, involving a palliative care team or such specialists as psychiatrists or pain specialists) should be conducted in order to assure that all other reasonable treatments have been provided and that palliative sedation meets the patient's goals [41,42]. When local expertise is limited, telephone consultation with experts in palliative medicine is strongly encouraged.

**Obtaining consent** — When patients with advanced illness are at risk of intolerable suffering, physicians should approach the option of palliative sedation at a time before the patient is in a crisis situation. The discussion of this option should include review of the aims, benefits, and risks of palliative sedation, as well as the alternatives to its use.

For patients experiencing severe or refractory distress but who are still conscious, alert, and communicative, a discussion on palliative sedation should be a part of a more comprehensive conversation that includes the following:

- The patient’s general condition and the cause of the distress
- Acknowledgment that prior treatments have not been successful
- Current prognosis, including predictions about survival
- Rationale, aims, and methods available for the use of palliative sedation, including the depth of planned sedation, patient monitoring, and if appropriate, the possibility of planned weaning from sedation and even discontinuation
- Alternative treatment options, the likelihood that they may relieve distress, and the expected survival
For patients who lack decisional capacity, the advance care plan of the patient should be followed. If there is no advance directive, the discussion regarding palliative sedation (including consent) must be obtained from a legally recognized proxy. When the patient is a child, parental consent is required; however, care options might be discussed in an age-appropriate manner for older children to facilitate their agreement (or assent) [6,43]. (See "Pediatric palliative care".)

For terminally ill patients who are actively dying and in severe distress, an opportunity to obtain consent by the patient or his/her health care proxy may not be present. In the absence of an advance directive or health care proxy, the provision of comfort measures (including, if necessary, the use of sedation) should be considered standard of practice and the default strategy for clinician treatment decisions.

Regardless of whether the patient has decisional capacity or not, patients and their families should be reassured that they will receive the best possible care during this time, irrespective of decisions to proceed with palliative sedation or an alternative treatment. In addition, patients should be informed that medical treatments and nursing care will be provided to ensure that the patient’s comfort is maintained and that the patient’s and family’s wishes are respected.

Sedative medications

Opioids — Many patients are already taking sedating opioids for pain or dyspnea, and can be treated simply with upward dose titration. These medications should not be discontinued even when comfort is achieved. (See 'Administration of previous medications' below.)

Benzodiazepines and other agents — Midazolam is a short half-life benzodiazepine with a rapid onset of action and is often prescribed for palliative sedation. In one prospective study, 24 of 176 patients (14 percent) receiving palliative care at home underwent palliative sedation using a stepwise administration of midazolam [44], which was administered predominantly due to agitated delirium. Based on the home care team and the individual patient’s relative’s experience, the use of midazolam was felt to be effective at minimizing distress and most expressed satisfaction with the procedure.

At least in the United States, midazolam is rarely used outside of the hospital, and is sometimes restricted to the intensive care unit (ICU), preoperative, or preprocedure settings. Another benzodiazepine option is lorazepam, which has a slower onset of action (10 minutes) as compared with midazolam (two minutes).

Alternative agents used in this context include levomepromazine [45,46], chlorpromazine [47,48], phenobarbital [49,50], and propofol [51-55]. These medications are reviewed in a table (table 2).

Administration — Sedation for the management of refractory symptoms is usually performed in an inpatient setting. However, substantial experience has been reported in home care settings [56], which may be a reasonable alternative for some patients.

Administration of the selected medication initially requires dose titration to achieve adequate relief, followed by ongoing therapy to ensure maintenance of the effect. In general, the level of sedation should be the least