

PALLIATIVE CARE

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INTRODUCTION

Patients with serious illnesses often have an intense burden of symptoms that are poorly treated, such as pain, dyspnea, anxiety, and depression.¹ These patients also have frequent but often unsatisfying interactions with the health care team, often due to poor communication.² *Palliative care* is “an approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual.”³ *Palliative medicine* refers to the medical expertise provided within a palliative care team. Palliative care, with its emphasis on goal setting and symptom management, attempts to improve care for these patients and their families. Many palliative care skills can be used in a variety of settings, and concepts such as shared decision making and a biopsychosocial-spiritual approach should not be reserved only for seriously ill patients.

Modern palliative care started with the hospice movement in the 1960s and has spread to many health systems worldwide. In the United States, at least two thirds of hospitals have palliative care teams,⁴ and hospice services are widely available. Despite their common roots, hospice and palliative care are not necessarily interchangeable terms. The meaning of *hospice* and the services offered vary by country, though hospices generally focus on later-stage illnesses. In the United States, hospice refers to an insurance benefit for patients with a life expectancy of less than 6 months. *Palliative care* is a more inclusive term that is appropriate “at any age and any stage in a serious illness, and can be provided together with curative treatment.”⁵ In the past, there was a perceived binary choice between aggressive curative treatment, then going onto hospice when those treatments failed. Palliative care now provides a

more nuanced picture of the time prior to hospice, with patients receiving concurrent palliative and curative treatment with increasing palliative care support if the illness progresses, until hospice services are appropriate (Fig. 49.1).⁶ For the purposes of this chapter, palliative care will encompass both palliative and hospice care unless otherwise specified.

Palliative care does not mean giving up, or even providing less aggressive care. It means talking to patients and families, eliciting their values and goals, and making medical recommendations and decisions based on those values and goals. This approach is sometimes referred to as *shared decision making*. It is not uncommon for the palliative care team to advocate for more aggressive treatment, either because it is in line with a patient's wishes and is reasonable medically or because aggressive treatment of specific medical problems can decrease a patient's symptom burden.

Palliative care teams generally approach symptom management by evaluating multiple aspects of a patient's condition, involving both physical and emotional pain. This concept acknowledges that part of the pain a patient feels may be, in part, due to existential or spiritual suffering. This may take the form of a belief that the person's upcoming death is punishment from a higher power, or that the person did not contribute enough to the world. Palliative care specialists attempt to determine what physical or psychosocial factors may be contributing to pain, and use medications or the expertise of other team members such as chaplains, social workers, or art therapists to help alleviate a patient's symptoms, in a broad sense.

Inpatient palliative care teams *reduce costs* while improving patient care. Medical advances and an aging

population have led to an increase in the number of patients with serious illnesses. The beneficiaries using the most Medicare dollars include those in the last year of life, even though many people say they do not want to die in a hospital. In 2010, benefits to the most costly 5% of members accounted for 39% of Medicare spending.⁷ Not only is the care expensive, but patients and families often describe distressing symptoms, psychosocial needs that go unrecognized, and overall poor care.⁸ Hospital costs decrease with palliative care consult services. For example, one study showed an average decrease in cost of \$6900 per patient, as well as fewer deaths in the intensive care unit (ICU).⁹ Cost reduction is not a primary goal of palliative care. Rather, patients who receive palliative care desire fewer interventions and resources. Importantly, palliative care teams do not increase in-hospital mortality rate.¹⁰ In some situations, palliative care may even *increase survival*. Patients with metastatic lung cancer, for example, lived 2 months longer compared to those receiving standard care.¹¹

What Is Hospice?

In the United States, hospice generally refers to a set of benefits from Medicare or private insurers. More than 40% of all deaths in the United States occur on hospice.¹² Hospice care decreases patient symptom burden, increases patient and family satisfaction, and is associated with cost savings, especially for patients with longer durations of hospice use.¹³ Hospice provides patients and families with the most help they can receive when caring for a person at home, including the services listed in Fig. 49.2. Contrary to some patients' beliefs, most hospice services

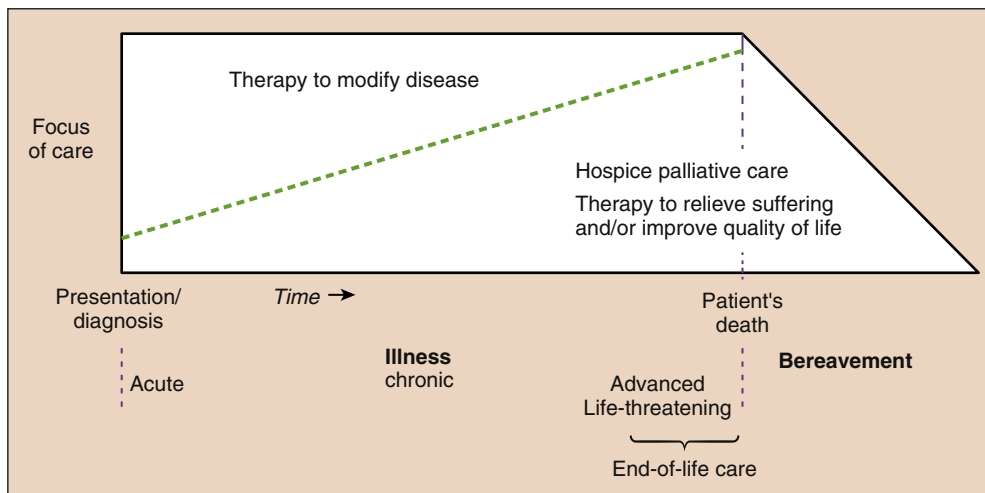


Fig. 49.1 The role of hospice and palliative care during illness and bereavement. (Redrawn from Ferris FD, Balfour HM, Bowen K, et al. A model to guide patient and family care: based on nationally accepted principles and norms of practice. *J Pain Symptom Manage.* 2002;24:106-123.)

are provided at home and hospice does not pay for caregivers. The hospice nurses and staff teach and support the family in caring for a seriously ill, dying patient, but the families provide the bulk of the care. Some families may opt to have hospice services provided in a nursing home, though the “custodial care,” or care of daily needs such as eating and bathing, provided by the nursing home will often not be covered by the patient’s insurance. A few patients will qualify for services at an inpatient hospice facility because of specific intractable symptoms such as

pain or vomiting, but usually not for the entire time they are receiving hospice (Fig. 49.3).

Hospice and Palliative Medicine Subspecialty

Hospice and Palliative Medicine is a board-certified subspecialty that requires a 1-year fellowship for certification. Physicians from 10 medical specialties including anesthesiology are eligible, and more than 100 anesthesiologists are board certified in Hospice and Palliative

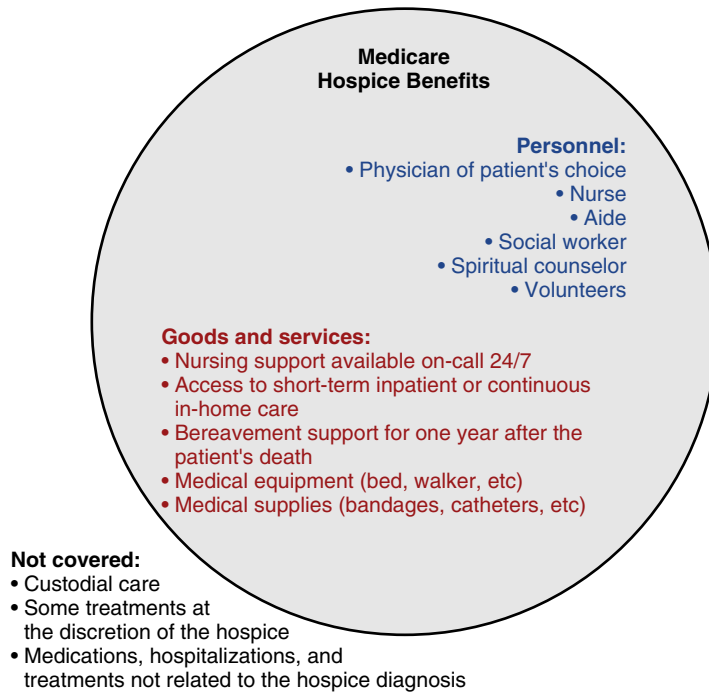


Fig. 49.2 Aspects of the Medicare hospice benefits.

Palliative Care and Hospice	
Continuous features	
<ul style="list-style-type: none"> • Multidisciplinary team • Symptom management: pain, dyspnea, psychosocial 	<ul style="list-style-type: none"> • Focus on quality-oriented care • Family support • Attempts to minimize suffering
Early Palliative Care <ul style="list-style-type: none"> • Appropriate at any stage of serious illness • Often provided in hospitals or outpatient clinics • Can be used in conjunction with "aggressive" care • Fee-for-service model 	Hospice <ul style="list-style-type: none"> • Prognosis < 6 months (can be renewed every 60 days) • Focus on home-based care • Patient usually agrees to focus on comfort rather than life-prolonging treatment • Through Medicare, billed on a per-diem rate

Fig. 49.3 Features of palliative care and hospice in the United States.

Medicine.¹⁴ Board-certified physicians provide specialist palliative care, which includes refractory symptom management and difficult family meetings.¹⁵ Although most anesthesiologists will not go on to be palliative care physicians, all anesthesiologists should have a familiarity with primary palliative care. This includes goals-of-care conversations and perioperative advance directives, in addition to skills in symptom management for seriously ill patients related to issues commonly seen in anesthesiology practice.¹⁶

Anesthesiologists' Contribution to Palliative Care

Anesthesiologists offer specific skills in the care of seriously ill patients in addition to standard perioperative care. Many elderly (also see [Chapter 35](#)) and seriously ill people have surgery,¹⁷ pain issues (also see [Chapter 44](#)), or critical illness (also see [Chapter 41](#)). Anesthesiologists may interact with palliative and hospice care patients in these settings. Anesthesiologists have expertise in the management of symptoms such as pain and nausea, which are frequent complaints of palliative care patients. Crucially, they also possess insight about the risks to the patient for the entire perioperative course and can add valuable information to conversations with patients and families about goals of care. Pain medicine (also see [Chapter 44](#)) and critical care anesthesiologists (also see [Chapter 41](#)) offer advanced skills and knowledge that can be invaluable in a palliative care patient's care.

WHAT DO PALLIATIVE CARE TEAMS DO?

Palliative care is an interdisciplinary field involving multiple professionals including physicians, nurses, social workers, chaplains, and others. Palliative care physicians are experts in symptom management and communication for seriously ill patients and their families. Palliative care nurses, including nurses who provide hospice care, practice symptom management, advanced communication skills, and assessment of the psychosocial and spiritual needs of a patient and family.¹⁸ Social workers address the psychosocial needs of patients and families and may assist with complex discharge needs.¹⁹ Chaplains assist patients and families in identifying and addressing spiritual distress related to serious illness and provide or facilitate appropriate spiritual or religious rituals.²⁰ Anesthesia pain experts may be involved in advanced pain (also see [Chapters 40 and 44](#)) management techniques, and anesthesia critical care specialists are often involved in complex goals-of-care discussions.

Palliative care teams assess and treat the patient's symptoms, discuss goals of care, and assess and treat the patient and family's psychosocial issues. The palliative care team takes a biopsychosocial-spiritual approach to

Box 49.1 Common Psychosocial Questions During Palliative Care Consults

"What role, if any, do religion or spirituality play in your life?"
 "Where do you live? With whom?"
 "What values are important in your life?"
 "How do you cope with the changes that are happening?"
 "What are your greatest concerns right now?"

Box 49.2 Commonly Assessed Symptoms During a Palliative Care Visit

Insomnia
 Dyspnea
 Fatigue
 Pain
 Anxiety
 Depression
 Nausea and vomiting
 Constipation

management and recognizes the interplay between these factors in improving overall patient care. Palliative care teams, like consultants, can either focus on a specific issue of concern to the team or perform a comprehensive assessment.

Consultations generally fall into two broad categories: goals-of-care consults and symptom management consults. For goals-of-care consults, palliative care specialists share information, get a sense of what a patient's goals and values are, and make medical recommendations based on those goals and values. For example, one patient's goal might be to stay out of the hospital and spend time with his or her dogs, and another's might be to live until the birth of a grandchild. Others may have goals like making amends with family members, or being able to walk around the house without pain. Palliative care teams also perform an in-depth psychosocial assessment, with questions like those listed in [Box 49.1](#). Talking with patients and families about their understanding of the medical issues, how they want to receive information, and how their home and spiritual lives contribute to their thinking about the medical situation can provide the primary teams with invaluable guidance. These conversations often include shared decision making and helping the patient and family determine a reasonable plan given the many complex factors in every patient's care. Including the patient and family in decision making does not mean offering or agreeing to a plan of care that the medical team believes is harmful or increases suffering.

Consultations for management of symptoms often focus on making the patient more comfortable and frequently involve management of pain or intractable nausea and vomiting. Symptoms that palliative care teams commonly address are listed in [Box 49.2](#). A number of

Box 49.3 Benefits Associated With Palliative Care in the ICU

- Decreased time in the ICU
- Decreased hospital length of stay
- No increase in mortality rate
- Decreased family member PTSD and anxiety
- Decreased disagreements between families and providers
- Decreased disagreements among providers

ICU, Intensive care unit; PTSD, posttraumatic stress disorder.

From Aslakson R, Cheng J, Vollenweider D, et al. Evidence-based palliative care in the intensive care unit: a systematic review of interventions. *J Palliat Med.* 2014;17:219-235.

these symptoms require a sophisticated understanding of the patient's underlying pathophysiology. For example, patients with vomiting may have an abdominal tumor, medication effect, or opioid-induced constipation. Patients determined to have intra-abdominal disease affecting the intestinal tract would need to be evaluated for ongoing versus intermittent obstruction and considered for treatment with octreotide or dexamethasone, and possibly a venting gastrostomy tube. Other symptoms close to the end of life like terminal delirium may require treatment with large doses of benzodiazepines or even phenobarbital. For patients whose symptoms do not respond to standard approaches, a palliative care consultation should be obtained.

Palliative Care in the Intensive Care Unit

Patients in the surgical ICU who stay more than 7 days have a mortality rate of more than 35%²¹ and should receive a palliative care consultation.²² Although some patients routinely stay in the ICU for specific nursing or monitoring needs after surgery, a significant proportion of patients and families will need to make difficult decisions about the treatment plan. Palliative care providers help patients and families determine goals of care, help resolve conflicts, and provide symptom management to patients in critical care units (Box 49.3).²³ Despite palliative care's perceived emphasis on comfort over cure, there is *no increased mortality rate* in patients in the ICU when palliative care teams are introduced (also see Chapter 41).

Communication among patients, families, and providers can be especially difficult in the surgical ICU. The common use of an "open model" ICU in the surgical setting can make it difficult for providers and families to form a cohesive plan.²¹ Additionally, what some authors have described as a "surgical covenant" between surgeon and patient, in which the surgeon has "an exaggerated sense of accountability for the patient's outcome," can further complicate the prognosis and make it difficult for all parties to agree on what constitutes a "good" outcome.²¹ Though traditional surgical thinking viewed palliative care as being at odds with surgical goals, the

current statement by the American College of Surgeons encourages integration of palliative care of surgical patients who have a range of conditions, not just those at the end of life.²¹ Thus, anesthesiologists should work closely with surgeons and palliative care specialists to ensure optimal care during periods of critical illness.

Withdrawal of Life Support

Many anesthesiologists may be involved in the withdrawal of life support for patients with poor prognoses whose families do not believe continued life-sustaining treatment is compatible with the patients' goals. For these patients, withdrawing life support is the ethical decision. It is important to note and clarify the distinction that family members may perceive when health care personnel discuss withdrawing life support (discontinuing a machine that keeps a patient alive artificially) and withdrawing care (discontinuing all concern about the patient's comfort and well-being). High-quality care and symptom management should be of utmost concern for all patients regardless of the treatment plan, and families should be reassured that the team will continue to care for the patient.

An important example arises in the context of withdrawing ventilator support. Many family members will prefer that the endotracheal tube be removed in addition to the ventilator being discontinued. It is crucial to prepare family members for the process of extubation of the trachea, including the expected coughing and secretions, and to have opioids and sedatives readily available to decrease any perceived discomfort during or after the extubation, such as shortness of breath. Anesthesiologists are experts in the rapid titration of fentanyl and midazolam, which are the most commonly used medications for withdrawal of mechanical ventilator support. A nurse or physician comfortable with administering these medications should be present during ventilator withdrawal in order to decrease signs of distress. Patients should not be paralyzed prior to ventilator withdrawal, as this would make it difficult or impossible to assess for proper titration of opioids and sedatives. Physicians overseeing withdrawal of life support should discontinue any unnecessary tubes and lines, contact the hospital chaplain for help accommodating spiritual care and religious rituals, and ensure family support.

Spirituality in Serious Illness

Serious illness and possible death often bring up spiritual issues like questioning the meaning of life or beliefs about what happens after death. Many patients say that religion is important in helping them adjust to, and cope with, the diagnosis of a terminal illness. Most physicians do not ask patients about their religious beliefs, though many patients and families describe their religion as being an important

factor in their decisions about medical treatment, and say they want to talk about this topic with their doctor.²⁴ A simple question like, “What role, if any, do religion or spirituality play in your life?” can help identify patients with unmet needs. There may also be religious rituals, such as the way a patient’s body should be handled after death, that are important for the health care team to know.

PALLIATIVE CARE AND PAIN

Pain management is often an important aspect in the quality of a seriously ill person’s life. As experts in pain management, anesthesiologists possess unique skills to contribute to this area. Many seriously ill patients have surgery and may have resulting acute-on-chronic pain (also see [Chapter 44](#)).

Use of Opioids at the End of Life

Some health care professionals may have concerns about the effect of opioids on a patient’s time to death and have apprehensions that the medications given are “killing” the patient. The ethical principle of double effect states that a physician can treat symptoms that may hasten death as a secondary effect, as long as the doctor’s intention is to have a good outcome, like decreased pain and distress, rather than a bad outcome, like death.²⁵ Opioids should be administered to these patients in response to signs of pain or discomfort, rather than arbitrarily increased. Opioids do

not shorten, and may even increase, the time to death in dying patients.²⁵ Thus, the appropriate use of opioids at the end of life is indicated from both a medical and ethical standpoint. If, after discussion, a member of the health care team feels significant moral distress in such a situation, another team member should be assigned to the patient.

Cancer Pain

Cancer pain is the most recognized type of pain for patients with life-threatening illnesses. Most patients with cancer pain can be managed via the World Health Organization’s Cancer Pain Stepladder,²⁶ but some will require the expertise of a pain medicine specialist. A variety of techniques to control cancer pain are available and are covered in [Chapter 44](#), Chronic Pain Management. Important factors to consider in cancer pain are the cause of the pain (such as tumor or chemotherapy-related) and the natural history of cancer pain, which generally gets worse instead of better. The cause of cancer pain is often complex and can be due to the tumor itself, edema around a tumor, or metastases in tissue, nerve, or bone; or it may be related to the cancer treatment itself, such as peripheral neuropathy or radiation-induced brachial plexopathy.²⁷ Treatment should be targeted to the cause of the pain when possible, and many patients may have pain from multiple sources. Given the complexities of cancer pain, adjunct medications are an important option ([Table 49.1](#)).

For some patients, chemotherapy, radiotherapy, or even surgery that aims to decrease the tumor burden may

Table 49.1 Adjuvant Analgesic Agents in Management of Cancer Pain, by Conventional Use Category

Category	Examples	Comment
Multipurpose Analgesics		
Glucocorticoids	Dexamethasone, prednisone	Bone pain, neuropathic pain, lymphoedema pain, headache, bowel obstruction
Antidepressants		
Tricyclics	Desipramine, amitriptyline	Used for opioid-refractory neuropathic pain, first if comorbid depression; secondary amine compounds (e.g., desipramine) have fewer side effects and might be preferred
SNRIs	Duloxetine, milnacipran	Good evidence in some conditions, but overall less than for tricyclics; better side-effect profile than tricyclics, however, and often tried first
SSRIs	Paroxetine, citalopram	Very scarce evidence, and, if pain is the target, other subclasses are preferred
Other	Bupropion	Little evidence for effectiveness, but less sedating than other antidepressants, and often tried early when fatigue or somnolence is a problem
α_2 -Adrenergic agonists	Tizanidine, clonidine	Seldom used systemically because of side effects, but tizanidine is preferred for a trial; clonidine is used in neuraxial analgesia
Cannabinoid	THC/cannabidiol, nabilone, THC	Good evidence in cancer pain for THC/cannabidiol; scarce evidence for other commercially available compounds

Table 49.1 Adjuvant Analgesic Agents in Management of Cancer Pain, by Conventional Use Category—cont'd

Category	Examples	Comment
Topical Agents		
Anesthetic	Lidocaine patch, local anesthetic creams	
Capsaicin	8% patch; 0.25%, 0.75% creams	High concentration patch indicated for postherpetic neuralgia
NSAIDs	Diclofenac and others	Evidence in focal musculoskeletal pains
Tricyclics	Doxepin cream	Used for itch; can be tried for pain
Others		Compounded creams with varied drugs tried empirically, but no evidence
Used for Neuropathic Pain		
Multipurpose drugs	As above	As above
Anticonvulsants		
Gabapentinoids	Gabapentin, pregabalin	Used first for opioid-refractory neuropathic pain unless comorbid depression; may be multipurpose in view of evidence in postsurgical pain; both drugs act at N-type calcium channel in CNS, but individuals vary in response to one or the other
Others	Oxcarbazepine, lamotrigine, topiramate, lacosamide, valproate, carbamazepine, phenytoin	Little evidence for all drugs listed; newer drugs preferred because of reduced side-effect liability, but individual variation is great; all drugs considered for opioid-refractory neuropathic pain if antidepressants and gabapentinoids are ineffective
Sodium-Channel Drugs		
Sodium-channel blockers	Mexiletine, intravenous lidocaine	Good evidence for intravenous lidocaine
Sodium-channel modulator	Lacosamide	New anticonvulsant with very scarce evidence of analgesic effects
GABA Agonists		
GABA _A agonist	Clonazepam	Very scarce evidence, but used for neuropathic pain with anxiety
GABA _B agonist	Baclofen	Evidence in trigeminal neuralgia is the basis for trials in other types of neuropathic pain
N-methyl-D-aspartate inhibitors	Ketamine, memantine, others	Evidence scarce for ketamine, but positive experience with intravenous use in advanced illness or pain crisis; little evidence for oral drugs
Used for Bone Pain		
Bisphosphonates	Pamidronate, ibandronate, clodronate	Good evidence; like the NSAIDs or glucocorticoids, usually considered first-line treatment; also reduces other adverse skeletal-related events; concern about osteonecrosis of the jaw and renal insufficiency might restrict use
Calcitonin		Scarce evidence, but usually well tolerated
Radiopharmaceuticals	Strontium-89, samarium-153	Good evidence, but restricted use because of bone-marrow effects and need for expertise
Used for Bowel Obstruction		
Anticholinergic drugs	Hyoscine compounds, glycopyrronium (aka glycopyrrolate)	Along with a glucocorticoid, considered first-line adjuvant treatment for nonsurgical bowel obstruction
Somatostatin analog	Octreotide	Along with a glucocorticoid, considered first-line adjuvant treatment for nonsurgical bowel obstruction

CNS, Central nervous system; GABA, γ -aminobutyric acid; NSAID, nonsteroidal antiinflammatory drug; SNRI, selective noradrenaline reuptake inhibitor; SSRI, selective serotonin reuptake inhibitor; THC, tetrahydrocannabinol.
From Portenoy RK. Treatment of cancer pain. *Lancet*. 2011;377:2236-2247.

be pursued to decrease pain even when there is no anticipated increase in life expectancy.²⁷ Anesthesiologists may be asked to evaluate patients for techniques such as a celiac plexus block, which decreases pain scores but does not change the need for opioids or the quality of life.²⁸ Bony pain may be due to osteoblastic or osteolytic components, and approaches such as intrathecal catheters, hormonal therapy, bone-modifying agents, or radiotherapy may be helpful. There may also be psychological aspects related to grief, anxiety, or depression that exacerbate a patient's cancer pain. Addressing those issues often enhances the effects of treatments that target physical pain. Similarly, patients with pain that does not respond to traditional pain medications should be screened for spiritual or emotional pain, and these patients should be provided with resources and support to address their distress. Treatment of spiritual pain may involve social work, psychiatry, psychology, chaplaincy, integrative medicine, or other fields. With the increasing number of cancer survivors, physicians should be more aware of issues of long-term opioid dependence and addiction.

Noncancer Pain

Noncancer pain, or pain in patients without cancer, is a major and yet insufficiently studied issue for patients with serious illnesses. Patients with diagnoses other than cancer may have more difficulty achieving pain control owing to lack of physician awareness that pain is associated with the patient's illness. Because anesthesiologists often provide much of the pain management expertise in a hospital, they should be aware of and knowledgeable about pain management in these seriously ill patients. Most patients with dementia have pain at the end of life, though the exact cause of the pain, such as ulcers or musculoskeletal pain, is unknown. Patients with chronic obstructive pulmonary disease (COPD) often have pain, though it is often not treated aggressively, possibly due to anesthesia providers being hesitant to provide opioids to this patient population. However, opioids are considered an accepted part of the treatment of dyspnea for advanced lung disease, as per the American College of Chest Physicians.²⁹ In this situation, the COPD patient's pain may go untreated because of the physician's concern about respiratory depression, despite the evidence in favor of opioids in this patient population. As with all pain, ideally the cause of the pain should be identified, and the treatment should be matched with the cause.

CHALLENGES IN THE PALLIATIVE CARE PATIENT

Identifying Palliative Care and Hospice Patients

Knowing which patients are appropriate for palliative care or hospice consultation can be difficult and

may depend on hospital or community norms. Seriously ill patients without clear treatment preferences or decision makers should have a palliative care consultation, as should patients whose care causes a conflict among staff members and those with refractory symptoms.²²

Inpatient Palliative Care Consults

In general, patients with life-threatening diseases (i.e., metastatic cancer, cirrhosis, or chronic renal failure) or illnesses with a likely probability of death (i.e., multiorgan failure, major trauma, or sepsis) should be considered for a palliative care consultation.²² Patients who are likely to die in the next year are good candidates for advance care planning. Also, patients with difficult-to-manage symptoms, like pain or nausea, or complex psychosocial or family issues often benefit from palliative care's interdisciplinary approach.

Hospice Consults

Hospice consultations should be sought for patients with a life expectancy of 6 months or less who are interested in focusing on symptom-related treatments rather than treatment with curative intent. Hospice services were initially designed primarily for cancer patients, who have relatively predictable courses in the last 6 months of life. However, cancer patients now make up less than half of hospice patients. Deciding which patients should receive hospice is more difficult for dementia, COPD, and chronic heart failure (CHF), which in combination compose the majority of hospice diagnoses, as these diseases lack good prognostic criteria.¹² Hospice referrals are often made very late in the course of illness, and the median time on hospice was only 17 days in 2015.¹² This means that a significant number of patients did not receive hospice services while they were eligible.

Hospice eligibility determinations are often straightforward but at times can be a challenge even for hospice medical directors. Most patients will fit into disease-specific guidelines created by Centers for Medicare and Medicaid Services (CMS) to help hospice medical directors determine eligibility.³⁰ For example, a patient with pulmonary disease would be eligible for hospice if he or she had dyspnea at rest, increasing visits to the emergency room or hospitalizations, and an oxygen saturation of less than or equal to 88% on room air.³⁰ However, a patient may be eligible even if he or she does not meet all these criteria if significant comorbid conditions or a rapid functional decline exists.³⁰ Therefore, there is room for medical interpretation in determining hospice eligibility, and some patients may qualify for enrollment with one hospice service but not with another.

Outpatient Palliative Care Consults

No clear criteria for outpatient palliative care referral exist. However, patients with complex symptoms,

psychosocial issues, or advance care planning needs who are not eligible for hospice are often good candidates.³¹ Outpatient palliative care clinics can help patients with advance care planning such as creating advance directives, as well as serve as consultants for patients with difficult to manage symptoms like pain or nausea.

Prognosis

Inherent in many of the discussions about appropriateness of palliative care and hospice consultations, and the ability of anesthesiologists to discuss goals of care, is the concept of prognosis. Anesthesiologists need to have a general idea of prognosis in order to make appropriate medical recommendations.

Physician Estimate

Many clinical decisions are influenced by perceived prognosis, such as whether to withdraw the ventilator, give chemotherapy, and proceed with surgery. Despite its importance, prognosis continues to be extremely difficult to determine. Prognostic accuracy tends to be poor, and most physicians tend to overestimate prognosis by a factor of five, with estimates being worse the longer the physician knows the patient.³² However, ICU physicians

tend to be overly pessimistic about their patients' survival.³³ Nurses and physicians often disagree about the likelihood of a patient's survival and quality of life, with nurses tending to be more pessimistic.³⁴ One proposed approach is that of the "surprise question." A physician answering "no" to the question, "Would you be surprised if the patient died within the next 12 months?" is a relatively good predictor of patients who are likely to do so.²² Although this question does not make the future easy to predict or provide clinicians with specifics about how long the patient will live, it can help frame some decisions, such as surgeries or treatments, and can help give families a better sense of what the health care team is thinking.

Disease Trajectories

It can be helpful for physicians to have and convey a concept of the patient's likely disease trajectory. Patients with most cancers follow a relatively predictable course, whereas those with COPD, for example, tend to have a long course of repeated hospitalizations and associated decline prior to death. These disease trajectories can be useful starting points for discussions with patients and families about what the future is likely to hold (Fig. 49.4).

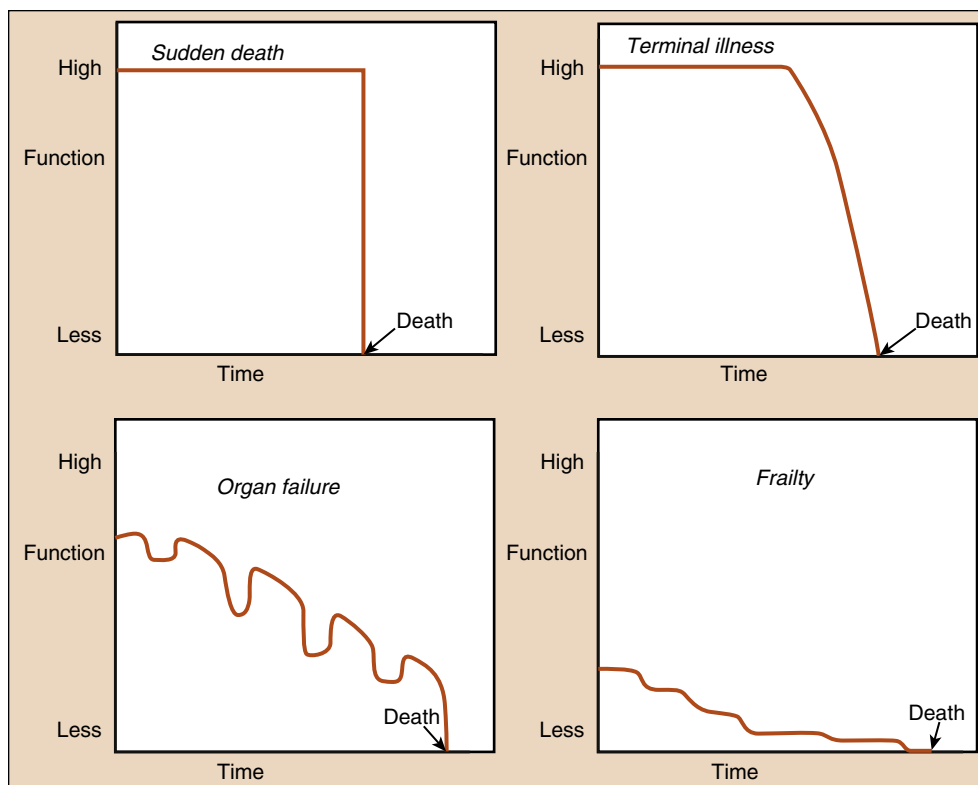


Fig. 49.4 Trajectories of dying. (Redrawn from Lunney JR, Lynn J, Hogan C. Profiles of older medicare decedents. *J Am Geriatr Soc.* 2002;50:1108-1112.)

Prognostic Tools

Multiple prognostic tools have been developed, particularly for critically ill patients³⁵ as well as for patients with other specific conditions. These tools can synthesize broad information about the severity of a patient's disease into a single number or percentile that is easier for caregivers, patients, and families to understand. They can therefore be very useful, but may not take into account all of a patient's comorbid conditions. They cannot predict which individual patients will live or die, which is the information that patients and families really want. Despite these limitations, prognostic calculators can be helpful in framing discussions with families about the patient's likely course.

Functional Status

Performance status generally correlates quite well with prognosis,³⁶ with a bedbound patient likely to have a much shorter life span than someone who is ambulatory. For example, a patient who is bedbound and recently stopped eating would likely have days to weeks, whereas a patient with a similar diagnosis who is up in a chair most of the day but needs help with bathing and dressing might have weeks to months.

Communication

An essential part of discussing medical issues with patients and families is ensuring understanding of a patient's medical issues. Although the medical team may take for granted that a patient starting dialysis has failing kidneys, the patient and family may not automatically associate those two pieces of information. Additionally, different members of the health care team may give patients and families different messages. For example, a cardiologist may inform the family that a patient's heart is improving after a myocardial infarction, while the intensivist tells the family that he is becoming worse because of worsening pneumonia and sepsis. Querying patients about how much they want to know and how they prefer to receive information (i.e., broad overview or specific details) helps to guide these conversations. Some patients may not want to know anything about their illness and can designate a surrogate to receive medical information and make decisions on their behalf.

Asking what the patient and family have been told about the patient's condition can give the clinician an idea about what issues need to be discussed in more detail. "Checking in" with the patient and family about how they are reacting to this information by saying things like, "Is this a surprise for you?" can give them a chance to express their emotions related to new information. Patients and families should have an opportunity to ask questions, and a plan should be made for the patient's care and future meetings, if needed. When possible, family meetings should involve a representative

from each specialty taking care of the patient, in addition to the patient or patient's surrogate, as well as other family members requested by the patient or surrogate. Although it can be challenging to find a time for everyone involved in a patient's care to meet, this investment generally leads to a more cohesive, logical care plan for the patient.

Many physicians struggle with how to begin family meetings. Common sense approaches include introducing the family and team members, giving a short explanation for why you are meeting, sitting down with the patient and family, and displaying empathy. A short meeting beforehand with the health care team members can be helpful. Sharing specialty-specific insights and getting a better sense of the decisions that will need to be made during the meeting are also helpful. Nurses, chaplains, social workers, and other professionals should be invited to attend as appropriate.

Occasionally, members of the health care team will disagree about a patient's prognosis, treatment plan, or a variety of other issues. This is expected³⁴ and should be addressed promptly and professionally. Disagreements that are glossed over can quickly become adversarial and lead to poor patient care and confusion for the family. Many of the same skills in conflict resolution, negotiation, and facilitation that palliative care physicians use in family meetings can be helpful in the setting of provider disagreement. A palliative care consultation should be considered for these situations to help formulate a cohesive care plan and provide the best care possible.

Physician Tendencies in Addressing Difficult Topics

Most physicians never receive any training in how to discuss difficult topics with patients, yet they are expected to do so routinely. As a result, physicians at all levels of training often feel uncomfortable discussing difficult topics with patients. Recordings of physicians show that they tend to focus on technical detail, avoid emotional topics, and dominate conversations.³⁷ There are many possible reasons for this approach, including a lack of training and the fact that these behaviors are likely to be coping mechanisms. Physicians should be aware of these tendencies and make efforts to overcome them through the use of words that are understandable, acknowledgment of emotion, and allowing patients and families to speak. Ideally, patients and families should be speaking for at least half of the conversation.

Patient and Family Wishes About Communicating Prognosis

Because of the difficulty involved with accurately predicting an individual patient's survival, many physicians avoid giving any kind of estimate to avoid being wrong.³⁸ However, in one study, 87% of surrogate

decision makers wanted the physician to give a prognosis, even if it was uncertain.³⁹ When given a prognosis, though, surrogates tend to be overly optimistic, especially with worse prognoses.⁴⁰ Many practitioners choose to state clearly that any estimate is a guess, and use ranges such as hours to days, days to weeks, or weeks to months to convey a general idea of the patient's life expectancy.

Frameworks for Communicating Difficult Information

Anesthesiologists in the ICU frequently need to communicate sensitive or difficult information about prognosis to patients and families, and it is often necessary in the perioperative or pain settings as well. Ensuring that patients understand their condition is an important part of informed consent for anesthesia. Most of the time, physicians will speak with families because many critically ill patients are unable to participate. Family-clinician communication in the ICU is often inadequate. In one study, only half of families had an adequate understanding of the patient's prognosis, treatments, or diagnoses after a discussion with ICU physicians.⁴¹

There are several formal frameworks for communicating prognosis to patients and families. The SPIKES protocol⁴² (Box 49.4), which includes asking for the patient's or family member's current understanding of the medical issues, responding with empathy, and agreeing on a follow-up plan, was originally described for breaking bad news, but the concepts apply in many instances.

Discussing Code Status

The palliative-care framework functions in the setting of discussions about resuscitation orders as well. Ideally, discussions about code status should take place in the context of a larger conversation about a patient's overall condition and goals. Between 1 in 1400 and 1 in 1800 patients experiences a cardiac arrest in the operating room.⁴³ The mortality rate in the immediate perioperative period for these patients is about 60%.⁴³ This survival rate is markedly better than that among patients who arrest on the floor or out of the hospital, which may be an important part of a patient's decision regarding code status in the perioperative period.

Time-Limited Trials

A time-limited trial is "an agreement between clinicians and a patient/family to use certain medical therapies over a defined period to see if the patient improves or deteriorates according to agreed-on clinical outcomes."⁴⁴ A time-limited trial is a method of dealing with prognostic uncertainty and is a useful tool in family discussions. For example, the family of a patient with a COPD exacerbation and a do not resuscitate (DNR) order may desire a trial of bilevel positive airway pressure (BiPAP) for several days to evaluate whether the patient tolerates

Box 49.4 A Framework for Breaking Bad News

Setting: Arrange for a quiet, private space large enough for all participants

Perception: Assess understanding. *"What have the doctors told you about your wife's illness?"*

Invitation: Ask how much information is desired. *"Some people like all the details, others just like the big picture. What would you like?"*

Knowledge: Tell what you know. Use language that is easy to understand and avoid using complex medical phrases.

Empathy: Acknowledge emotions. *"I wish things were different."*

Sequelae: Agree on next steps. *"Let's meet tomorrow afternoon so I can update you on her condition."*

From Baile WF, Buckman R, Lenzi R, et al. SPIKES—A six-step protocol for delivering bad news: application to the patient with cancer. *Oncologist*. 2000;5:302-311.

the intervention and has improved symptoms.⁴⁴ Before starting a time-limited trial of therapy, the medical team should take the following steps: (1) clarify the patient's medical issues and the risks and benefits of any proposed treatments, (2) decide on and discuss with family a reasonable time frame for improvement and reevaluation, (3) implement the trial, and (4) reassess the patient at the end of the agreed-upon time frame. Time-limited trials will not work for every patient, especially those with rapid changes in their clinical conditions, but they can help patients, families, and providers determine a consensus plan when uncertainty or disagreement exists.

Identifying the Imminently Dying Patient

Anesthesiologists may care for dying patients in the ICU, and patients whose death process has not been identified may occasionally present to the operating room. Thus, anesthesiologists should be able to recognize signs of the dying process in order to provide appropriate care for these patients. Additionally, anesthesiologists should be able to provide information for interested family members about what the dying process looks like. Unfortunately, there are few signs that are both sensitive and specific for impending death. Change of consciousness, dysphagia, and decreased oral intake are sensitive but not specific, for example.⁴⁵ Mandibular movement with breathing, peripheral cyanosis, and Cheyne-Stokes breathing are reasonably specific for patient death within 3 days but occur in less than 60% of patients.⁴⁵

PERIOPERATIVE MANAGEMENT OF THE PALLIATIVE CARE PATIENT

A list of perioperative considerations is provided in Box 49.5.⁴⁶

Advance Directives

Advance directives encompass a variety of legal documents such as living wills, Five Wishes, or state-specific advance directives, which describe a patient's wishes for medical care. Many of these describe options such as artificial hydration and nutrition or life support, if the patient has no hope of recovery. Although these documents can be useful as a guide, they rarely offer unambiguous guidance for the entirety of the wide range of clinical scenarios.⁴⁷ Many clinicians advocate for patients' naming a surrogate and for discussions about values and goals among the patient, surrogate, and health care team.⁴⁷ Patients who prepare advance directives are more likely to receive care that aligns with their preferences,⁴⁸ and many advance directives include the naming of a surrogate decision maker as part of the form.

Decision-Making Capacity

Many patients who are in the perioperative period or in the ICU may not have decision-making capacity owing to an inability to communicate, medical issues,

or medications.⁴⁹ Determining whether a patient has capacity to make medical decisions can be difficult. In fact, identifying patient decision-making capacity⁴⁹ can change over time, so physicians must be cognizant that a patient who was previously able to make decisions may have become delirious, for example, and no longer be able to understand the risks of a procedure. The criteria used to decide whether a person has capacity are “the ability to communicate a choice, to understand the relevant information, to appreciate the medical consequences of the situation, and to reason about treatment choices.”⁴⁹ Asking questions like, “Can you tell me what surgery we are doing and why?” and “Can you tell me the risks of the procedure?” can help clarify whether a patient has decision-making capacity. If the physician is uncertain whether a patient has decision-making capacity, a psychiatric consult may be appropriate. Deciding whether a patient has decisional capacity is a crucial step in the perioperative evaluation. Patients without decisional capacity cannot give informed consent for anesthesia, and a surrogate must be identified for the patient in most cases.

Box 49.5 Perioperative Considerations for Palliative Care Patients

Preoperative Considerations

Look in chart for advance directive or documentation of code status

Determine if the patient needs a surrogate, and if so, who that person is

If DNR or other limits on treatment listed, clarify patient's desires based on ASA guidelines⁴⁶:

- Full attempt at resuscitation
- Limited attempt at resuscitation defined with regard to specific procedures
 - Patient or surrogate should be informed about which procedures are essential to providing anesthesia (i.e., an endotracheal tube) and which are not (i.e., chest compressions)
 - *Example:* Patient with extensive rib metastases declines chest compressions but desires other medications and procedures as appropriate
- Limited attempt at resuscitation defined with regard to the patient's goals and values
 - Patient or surrogate allows the medical team to decide which procedures are appropriate
 - *Example:* Patient wants to have issues that seem easily reversible treated (i.e., respiratory depression in the PACU after accidental narcotic overdose) but does not want treatment that may lead to neurologic compromise (i.e., does not want prolonged CPR)

Document any changes in treatment limitation clearly in the chart

- Include the people present during the discussion

- When the original advance directive will be reinstated
 - Per ASA guidelines, “when the patient leaves the PACU or when the patient has recovered from the acute effects of anesthesia and surgery”

Discuss any changes in treatment limitation with the surgeon, nurse, or other appropriate parties

Ensure that the patient receives any scheduled pain medications preoperatively

Consider involving spiritual care to perform appropriate rituals if there is a high risk of death

Review past medications for agents like Adriamycin and bleomycin

Review records for sites of metastases including lung or brain

that may impact physiology

Assess decision-making ability of patients with brain metastases or suspected cognitive impairment

Consider preoperative epidural placement for appropriate patients

Assess baseline functional status and general prognosis

Intraoperative Considerations

Take special care in positioning cachectic patients and those with poor skin integrity

Consider PONV prophylaxis for at-risk patients

Communicate any limitations in treatment to oncoming providers

Postoperative Considerations

Consider possibly increased postoperative pain requirements in context of baseline opioid use

Ensure availability of rescue antiemetic for at-risk patients

Communicate any limitations in treatment to PACU providers

ASA, American Society of Anesthesiologists; CPR, cardiopulmonary resuscitation; DNR, do not resuscitate; PACU, postanesthesia care unit; PONV, postoperative nausea and vomiting.

Surrogate Decision Makers

A surrogate decision maker is a person who makes medical decisions on the patient's behalf. Patients may name surrogate decision makers at any point. Patients with decisional capacity may either continue to make their own decisions or defer decisions to their surrogate. Some states have lists that order the priority of surrogates for patients who have not designated one. Surrogates' wishes may not always match those of the patient,⁵⁰ so communication about goals and values is crucial. Surrogates should make decisions in the patient's best interest and that are the surrogate's best guess as to what the patient would want, which is not necessarily what the surrogate would choose. Clarifying this distinction with questions like, "What do you think your father would say if he were able to sit with us and understand this information?" can be helpful.

How to Approach Perioperative DNR Conversations

Recommendations From the American Society of Anesthesiologists

About 15% of patients who present for surgery have a DNR order,⁵¹ so all anesthesia providers should be well versed in discussing these important issues with patients and families. Additionally, almost 25% of surgical patients with DNR orders die within 30 days of surgery.⁵² The American Society of Anesthesiologists (ASA) has published guidelines for care of patients with DNR orders and limitations on treatment.⁵³ For the purposes of this section, DNR will refer to both DNR orders and other limitations on treatment found in documents such as advance directives. The guidelines emphasize that the automatic and complete suspension of DNR orders (or

other advance directives) may violate the patient's right to self-determination and that a discussion with the patient or surrogate prior to the procedure is essential. The ASA describes three outcomes for discussions for patients with a DNR order who present for surgery (Table 49.2). Importantly, a DNR order may be completely suspended or partially suspended in defined ways to meet patient preferences. An essential part of the ASA guidelines includes discussion and documentation regarding whether, and when, the original DNR order will be reinstated. According to the ASA, "this occurs when the patient leaves the postanesthesia care unit or when the patient has recovered from the side effects of anesthesia/procedure."⁵³ These discussions should always be clearly documented.

Recommendations From the American College of Surgeons and the Association of periOperative Registered Nurses

The similarities in recommendations among professional societies of anesthesiologists, surgeons, and nurses are striking (Table 49.3).^{54,55} As with the ASA, they recommend a more tailored approach rather than automatic suspension. Despite this, 30% of physicians believe DNR orders should be automatically suspended during surgery, and a large majority of patients want to discuss perioperative changes in DNR orders with their physicians.⁵⁶ A study in 2012 demonstrated that only half of surgeons discuss advance directives prior to surgery, and half would not take a patient to the operating room with limitations on treatment.⁵⁷

Hospice Patients Who Present for Surgery

Hospice patients may decline hospice services at any point. There are cases in which surgery can reduce

Table 49.2 Scenarios for Patients With Perioperative Limitations on Treatment, per the ASA

Full Attempt at Resuscitation	Limited Attempt at Resuscitation Defined With Regard to Specific Procedures	Limited Attempt at Resuscitation Defined With Regard to the Patient's Goals and Value
Full suspension of existing DNR. Any procedures may be used.	Specific procedures, for example chest compressions, may not be used. The anesthesiologist should inform the patient which procedures can, or cannot, reasonably be refused during an anesthetic.	Anesthesiologist may use clinical judgment to determine which resuscitation procedures are appropriate. Full resuscitation may be desired for events that are likely to be easily reversible, but not those likely to lead to an unwanted outcome.
A woman who was recently diagnosed with breast cancer decides to suspend her DNR during the surgery, saying, "I have two kids at home, and I want to live as long as I can for them."	A woman with breast cancer with extensive metastases to her ribs agrees to all interventions except chest compressions, saying, "Even if it worked, I don't want to be on a ventilator with shattered ribs."	A woman with breast cancer whose greatest fear is being unable to recognize her children says, "If you think you can fix the problem and I'll go back to being myself, please do that. If my brain is unlikely to recover, then please don't pursue more aggressive measures."

DNR, Do not resuscitate.

From American Society of Anesthesiologists (ASA). Ethical Guidelines for the Anesthesia Care of Patients with Do-Not-Resuscitate Orders or Other Directives That Limit Treatment. Accessed June 24, 2015. <http://www.asahq.org/quality-and-practice-management/standards-and-guidelines>.

Table 49.3 Comparison of Professional Society Statements Regarding Surgical Patients With DNR Orders

Topic	American Society of Anesthesiologists	American College of Surgeons	Association of periOperative Registered Nurses
Statement regarding automatic suspension of DNR orders for surgery	“Policies automatically suspending DNR orders or other directives that limit treatment prior to procedures involving anesthetic care may not sufficiently address a patient’s rights to self-determination in a responsible and ethical manner”	“Policies that lead to either the automatic enforcement of all DNR orders or to disregarding or automatically cancelling such orders do not sufficiently support a patient’s right to self-determination”	“Reconsideration of do-not-resuscitate or allow-natural-death orders is required and is an integral component of the care of patients undergoing surgery or other invasive procedures”
Guidelines for the care of surgical patients with DNR orders	“Prior to procedures requiring anesthetic care, any existing directives to limit the use of resuscitation procedures ... should, when possible, be reviewed with the patient or designated surrogate” ⁵³	“The best approach for these patients is a policy of ‘required reconsideration’ of the existing DNR orders ... [with] the patient or designated surrogate and the physicians who will be responsible for the patient’s care”	“Health care providers should have a discussion with the patient or patient’s surrogate about the risks, benefits, implications, and potential outcomes of anesthesia and surgery in relation to the do-not-resuscitate or allow-natural-death orders before initiating anesthesia, surgery, or other invasive procedures”

DNR, Do not resuscitate.

Data from the American Society of Anesthesiologists,⁵³ American College of Surgeons,⁵⁴ and Association of periOperative Registered Nurses.⁵⁵

suffering, such as the surgical repair of an open fracture after trauma, for example. Surgery for hospice patients should prompt a discussion of the risks and benefits of the procedure, as well as the status of any orders for limitations on perioperative treatment.

CONCLUSION

Palliative care is a new field that focuses on the relief of suffering in patients with life-limiting conditions. Anesthesiologists have many skills to offer palliative care patients including skills in pain and symptom management and the care of the critically ill. Palliative care should not be reserved only for dying patients. Anesthesiologists should have a working knowledge of what palliative care and hospice offer, how the anesthetic care fits into the patient’s overall course, and the legal and ethical issues surrounding perioperative limitations on treatment.

QUESTIONS OF THE DAY

1. What types of consultations are most often performed by palliative care teams?
2. How can opioids be used in an ethical manner at the end of a patient’s life? What is the principle of double effect?
3. What strategies can be used to conduct family meetings for a patient with a life-threatening illness?
4. How can a time-limited trial of therapy be used in the management of a critically ill patient with prognostic uncertainty?
5. How should the anesthesia provider approach perioperative do not resuscitate (DNR) conversations? What are the recommendations of the American Society of Anesthesiologists, American College of Surgeons, and Association of periOperative Registered Nurses?

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