Lesson S29: PreAnesthetic Assessment of the Patient with an Advance Directive

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Read this article, reflect on the information presented, then go online and complete the lesson post-test and course evaluation before the termination date below. (CME credit is not valid past this date.) You must achieve a score of 80% or better to earn CME credit.

TIME TO COMPLETE ACTIVITY: 2 hours
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Practice Gaps

To date, less than half of the American population have properly executed advance directives. Cumbersome legal wording often leaves physicians unsure as to how to proceed when confronted with a patient who either refuses medical care or defines limitations. As some anesthetic practices may be interpreted as “resuscitation”, it is important for anesthesiologists to recognize distinctions.

Objectives

At the end of the lesson, the participant will be able to:

1. List ethical guidelines as described by the ASA
2. Differentiate between advance directive and living will
3. Define health care proxy
4. Present a plan for a patient with an advance directive
5. Understand why advance directives were developed
6. Cite the financial burden of end of life care
7. Be aware of the Patient Self Determination Act
8. Identify where advance directive and living will forms can be accessed
9. Recognize that States have different requirements regarding living wills and advance directives
10. Distinguish techniques of anesthesia care from typical resuscitation

Case Presentation

A 77 year old man was seen by an anesthesiologist in the preanesthetic area at 7 am. He had undergone two heart surgeries, 3 and 5 years prior to this admission. His medical history was positive for hypertension, diabetes and angina and he was maintained on multiple medications. He was limited in activities of daily living to the point that his quality of life was severely impaired. He was now
scheduled for a third surgery to repair aortic and mitral valves. He presented the anesthetic care team with a 30-page advance directive immediately prior to surgery.

Introduction

It is more than 30 years since the groundbreaking decision, handed down by the Supreme Court of New Jersey, formally affirmed the right of Karen Ann Quinlan to die. Since then, every state has enacted legislation to recognize the legal right of competent adults to write advance directives and provide directions for health care decisions near the end of life at a time when the ability of self-decision has failed.\(^1\) A multitude of legal terms frequently makes interpretation difficult when determining what should be done and what is within the patients’ and physicians’ rights.

Definitions

An **advance care directive** is a set of written instructions drawn up by a patient indicating care and treatment preferences if rendered unable to make such decisions due to severe illness. The advance directive has two parts - a **living will** which clearly specifies health care preferences; and designation of a **health care proxy** or power of attorney. The health care proxy document names someone – usually a family member or friend - to make decisions on behalf of the patient if the patient loses the power of self-determination. Both documents are completed to provide comprehensive guidance regarding the desired care. Advance directives can include additional instructions such as specifying the level of resuscitation desired (if any), with details such as the number of times an individual is intubated; and decisions regarding permissible organ or tissue donations.

In some states, oral advance directives are considered legal. An individual can make a verbal statement which is transcribed and witnessed by another person. For persons with mental illness, health care choices can be contingent on the individual becoming severely mentally incapacitated and unable to make health care decisions. This document is a **mental health care directive** or psychiatric care directive. While state laws vary, they all generally allow doctors to cease measures that prolong life in the case of terminal illness or persistent vegetative state.

The living will is a formal legal document that must be written and signed by the patient. The use of a model form, available in most states, may or may not be optional. Most laws require that the document is witnessed and notarized. Spouses, potential heirs, the personal physician and, in some instances, employees of health care facilities are usually not allowed to witness living wills.

A living will can be revoked and generally does not apply if there is expectation of recovery. Some states automatically void the living will after a certain number of years, arguing that it is made during a moment in time which changes with situations and advancing age.

Cardiopulmonary resuscitation (CPR) was first described in 1960 for witnessed intraoperative arrests. Closed chest cardiac massage quickly became universal practice, and a legal imperative in many hospitals.\(^2\) Survival rates were low in part due to indiscriminate application and resistance by health care workers when the patient was considered to be in a terminal state. By the mid-1970s, decisions **not-to resuscitate** (DNR) were legalized. The AMA recommended that decisions to forego resuscitation be formally documented and communicated.\(^3\) CPR was applied for the prevention of a sudden unexpected death rather than the treatment of a terminal irreversible illness. Explicit DNR policies
followed, underscoring the patient’s right to self-determination. A report in 1983 from the President’s Commission for the Study of Ethical Problems in Medicine stated that resuscitation attempts should be done in almost all cases with CPR as the standard of care unless clearly documented otherwise.4

**Background**

The concept of a living will was first introduced in an Indiana law journal in 1969.5 As part of existing estate law, individuals could specify management of their property and affairs after death (when they could no longer speak for themselves). By extension, individuals could express health care desires should they no longer be able to do so because of the nature of disease. This form of “will” was intended to be implemented when the person was still alive and subsequently dubbed the “living will.”6

Advance directives were developed to address the problems of an aging and potentially more debilitated population.7 As medical technology expands, life expectancy increases and, with it, the need for more end of life care. In the United States it is estimated that up to 50% of deaths occur in health care facilities. Also, one study found that of 252 hospital deaths, 196 (78%) were treated and subsequently 165 (65%) died in the ICU.8 Many studies have pointed to problems in terminal care indicating that it is prolonged, painful, costly and emotionally taxing on family members.8-13

Living wills became widely accepted. However, the use of advance directives was much less clear and many people remained unaware of this option with even fewer actually completing them.14 This deficit was partially viewed as a failure of medical organizations to present these options to the population. The Patient Self-Determination Act (PSDA) was passed by the U.S. Congress in 1990 as an amendment to the Omnibus Budget Reconciliation Act of 1990. Effective on December 1, 1991, this legislation required hospitals, nursing homes, home health agencies, hospice providers, HMOs, and other health care institutions to provide information about advance health care directives to adult patients upon admission to the facility.15 The law does not apply to individual doctors. Patients are given written notice upon admission to the health care facility of their decision-making rights, and policies regarding advance health care directives in their state and in the institution to which they have been admitted. The purpose of the Patient Self-Determination Act was to inform patients of their rights regarding decisions toward their own medical care, and ensure that these rights are communicated by the health care provider. Specifically, the rights ensured are those of the patient to dictate their future care (by means such as living will or power of attorney) should they become incapacitated.

**Patient rights include the right to:**

- facilitate their own health care decisions
- accept or refuse medical treatment
- make an advance health care directive

Facilities must inquire as to whether the patient already has an advance health care directive, and make note of this in the medical records. They must also provide education to their staff and affiliates about advance health care directives. Health care providers are not allowed to discriminatedly admit or treat patients based on whether or not they have an advance health care directive.
As living wills became more common, deficits were identified and questions arose about the scope of the document. Advancements technology also created new ethical concerns. Many issues arose such as:

- The use of equipment such as dialysis machines or ventilators
- "Do not resuscitate" orders
- Administration of intravenous fluids or tube feeding
- Withholding of oral intake
- Should comfort care be continued (pain, antinausea, etc.)
- Can organ or body tissue donation be allowed
- Differentiation between the choice not to have aggressive medical care or refusing all medical care

The content of advance directives has undergone several generations of revisions in order to address many of these issues including the addition of the health care proxy or medical power of attorney.

**Ethical issues in Anesthesia**

Addressing the anesthetic needs of patients with advance directives or living wills often presents ethical and legal issues.

Medical ethics in the United States is guided by the Code of Medical Ethics of the American Medical Association which recognizes a responsibility to the patient, society, other health care professionals, and to one’s self. The code represents standards of conduct rather than laws. As stated by the AMA, ethical practice requires that the professional provides competent medical care, exhibits professionalism, honesty, and strives to report incompetent or deficient health care providers. Physicians should respect the law, but seek changes if it is in the best interest of patients and continue to study. Ethical practice emphasizes freedom to choose whom the physician serves, except in emergencies, and a responsibility to participate in activities that improve the community and better public health. The responsibility to the patient is paramount. Access to medical care for all people should be supported.

Ethical care as defined by the American Society of Anesthesiologists (ASA) is based on the principles put forth by the AMA. However, when directing other anesthetic providers, the ASA states that the anesthesiologist is responsible for:

- Preanesthetic evaluation
- Prescription of the anesthetic plan
- Personal participation in the most demanding parts of the procedure, especially induction and emergence
- Monitoring the course of anesthesia at frequent intervals
- Remaining physically available
- Providing postanesthetic care
Efficacy of Advance Directives

On July 28, 2009, President Obama announced publicly that he and his wife had living wills and encouraged others to do the same. The announcement followed controversy surrounding proposed health care legislation to permit the payment of doctors under Medicare to counsel patients regarding living wills, an addition that was later rejected. Nevertheless, universal adoption of advance directives has met with controversy as to the efficacy of this tool. Several studies have indicated that 70-95% people would rather refuse aggressive medical treatment than have their lives medically prolonged with poor prognosis. However, the complexity of the forms and the variations between states results in a low rate of appropriately completed advance directives among older patients.

There is extensive research – primarily descriptive studies – pertaining to end-of-life care in nursing homes in the United States. Empiric research points to a poor quality of end-of-life care nationwide. An observational cohort study of Medicare data and survey data from the Health and Retirement Study were combined to determine whether advance care planning was associated with improved quality of care at the end of life. Advance care planning was defined as having an advance directive, power of attorney or having discussed preferences for end-of-life care with relatives. Seventy-six percent of subjects engaged in advanced care planning with 92% of advance directives indicating comfort as a priority. Those who participated in advanced care planning were less likely to die in hospital and more likely to be enrolled in hospice care for > 3 days before death. Another study emphasized the need to engage surrogates at the time of hospital admission to clarify patient preferences and strengthen communication between surrogates and the health care team. Other researchers found that while relatives have positive experiences with advance directives, there lacks strong evidence that proxy advance directives are influential in the last phase of life and are best seen as a tool for planning only. With the wide diversity in cultural and religious beliefs throughout the United States, there remains a great need for standardization of procedures based on increased communication, legal consensus, increased trust between patients and clinicians, and improved standards and quality of care to respect the patient’s will and the role of the family.

Physician View

Advances in medical technology provide many ways to keep patients alive when body functions are failing. Physicians often promote continued care rather than participate in discussions with the patient and family about comfort care versus ongoing treatment. Also, the deep American tradition is that progress is unending and it is a moral imperative that “cure” rather than “care” is the primary goal. It is not surprising that physicians are conflicted over the implementation of an advance directive or DNR.

Anesthetic care implies the use of resuscitative measures such as intubation, ventilation, administration of vasoactive drugs. Also, there remains inconsistency regarding what measures should be done intraoperatively. Some of the additional ASA guidelines can impose restrictions that compromise the autonomy of the anesthesiologist. Mohr supports the perioperative suspension of the DNR order for a limited period with the assurance that therapeutic procedures started during surgery will be discontinued postoperatively if the underlying disease is non-reversible. Other authors disagree and note that DNR orders are not incompatible with subsequent surgical care in an operating room. Rather “required reconsideration” is necessary and explanations, resulting in informed consent, should be the responsibility of the anesthesiologist. Some surgeons disagree and proceed with surgery without verifying the patient’s wishes.
More recent studies have examined physician attitudes towards advance directives. In a review of 17 articles from 1989 - 2011, Coleman found that while overall, physicians have a positive attitude towards patients with advance directives, there are marked differences in attitude towards these wishes and compliance by the health care provider. In another study, attendees at two Mayo Clinic continuing medical education courses were surveyed. Questions measured respondents’ perception of legal risk, concerns about patient knowledge of factors involved in their care and the impact of medical costs by compliance with patient preferences to undergo aggressive therapy in a terminal condition. Eighty percent were likely to honor a patient’s wishes. Less than half would honor the advance directive of a patient in ventricular fibrillation who wanted “to pass away in peace”. Seventeen percent would forego an advance directive following a family request to continue resuscitation and 52% considered risk of liability to be lower than keeping someone alive against their wishes. Most also felt that cost should not be a consideration and believed that patients could appreciate their situation.

In the area of palliative care, while 97.5% of primary physicians stated that they were comfortable in discussing advance care planning with patients, only 43% actually considered advance directives with appropriate patients. The authors of this investigator-generated survey suggest that, as referrals to palliative care units occur near the end of life, primary care physicians may contribute to some of the barriers to these discussions. These findings are further supported by a survey that compared compliance and understanding of advance directives between older and younger physicians. Doctors under 40 years of age focus less on correctly interpreting the wishes directly expressed by patients. Doctors over 61 years of age place greater emphasis on the importance of the clinical application of advance directives and the balance of qualified medical decisions in compliance with patient desires.

What is next?

Despite best efforts, still only about 25% of Americans have an advance directive evidencing the need for a better and more understandable system. Doukas and McCullough proposed the “Values History”, created at the Georgetown University School of Medicine, first published in 1988, and cited again in 1991. A Values History Form contained a set of questions intended to create an understanding of the patient’s values and personal goals so that clinicians and family members can best make decisions if the individual was incapacitated. The Values History Form is available via the Hospice and Palliative Care Federation of Massachusetts. Emanuel and Emanuel of Massachusetts General Hospital and Harvard Medical School published a six-page document provides six case scenarios for advance medical decision-making and allows the individual to decide in advance which treatments are wanted or not wanted. Criticisms include the suggestion that individuals may be required to make inappropriate medical treatment decisions, which they are typically not equipped to make.

The Five Wishes directive was developed in collaboration with multiple experts and funding from the Robert Wood Johnson foundation, and is distributed by the Aging with Dignity organization. The document meets statutory criteria in 42 states. Criticisms include use of “wishes” rather than “directives” which leaves room for uncertainty about decisions. Furthermore, the appointed agent authorities are less complete than those found in other directives; and pain management specifications appear insufficient to meet American Medical Association standards.

The most recent advance directive is the Lifecare Advance Directive. More than 6,500 articles from medical, legal, sociological, and theological sources were consulted to create this directive. The basic
principle behind this method is that advance directives should be based on "health outcome states" rather than on medical treatments and legal jargon. The primary criticism has been that it is very lengthy and tedious to complete.

Management of the case

The surgeon was advised that there would be a delay in starting the case agreed to a discussion with the anesthesiologist, patient and family to review the advance directive. The patient had specifically noted that he did not want to be ventilated or intubated. It was explained to him that intubation and ventilation was a part of anesthetic management and his case could not be done under regional or local anesthesia. He was informed of the agents that would be used and the expected duration of action. The patient expressed to the surgeon a concern about coming off bypass. They agreed that if he could not be successfully weaned after approximately 30 minutes, resuscitative efforts would be discontinued. The anesthesiologist then addressed the possible need for continued ventilation post-operatively. The patient was reluctant to agree to any ventilatory support at first. It was explained that frequently after cardiac surgery patients did remain intubated for some hours. He agreed to respiratory support for 36 hours with good pain control and then the tube be removed. If he had difficulties breathing, he agreed to be reintubated once for 48 hours. Thereafter, he wanted to breathe spontaneously. He refused multiple laboratory testing. The family was in agreement with the plan which was documented.

The operation proceeded smoothly and the patient came off bypass on the second attempt. He was extubated after 30 hours but quickly developed respiratory difficulties. He was reintubated but the chest X-ray and blood gas analyses showed worsening gas exchange, pulmonary consolidation and congestive heart failure. The patient indicated that he wished the tube removed and pain medication be given. The anesthesiologist and surgeon complied with his wishes. He died 12 hours later.

Conclusion

Despite the struggle to improve end-of-life care focusing mainly on living wills, hospice care and improved doctor-patient relationships, there has been only modest success in introducing advance directive planning to all Americans. Barriers include physician reluctance, complexity of forms and lack of education. Nevertheless, it is essential that anesthesiologists are aware of the law and be prepared to have in depth discussions with patients to better understand their wishes while explaining the anesthetic process.

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**POST-TEST**

1. **An advance care directive:**
   a. Is a set of written instructions
   b. Does not apply to organ donations
   c. Never involves a health care proxy
   d. Is an alternate name for a DNR

2. **A living will:**
   a. Can be signed only by the health care proxy
   b. Must be signed by the patient
   c. Is always applicable even if the patient has completely recovered
   d. Can never be revoked

3. **Do not resuscitate decisions:**
   a. Have been legal since the time of common law
   b. Were first legalized in the mid 1970s
   c. Do not require formal documentation
   d. Do not address the patient’s right to self determination

4. **Select a true statement:**
   a. Less than 25% of patients in the US die in health care facilities
   b. Terminal care is rarely painful
   c. The majority of patients who die in hospitals are cared for in intensive care units.
   d. Cost is not a consideration in end-of-life care

5. **The Patient Self Determination Act:**
   a. Does not apply to hospitals
   b. Requires all health care facilities to provide information about advance directives to adult patients on admission
   c. Applies also to individual physicians
   d. Was passed by Congress in 2010
6. **With regard to patient rights, which of the following is a false statement:**

a. An advance directive may be used to deny a patient admission to a hospital  
b. A patient can refuse medical treatment  
c. A patient may make his/her health care decisions  
d. The patient is afforded the right to make an advance directive

7. **Ethical issues in anesthesia:**

a. Do not deal with advance directives  
b. Relate solely to the conduct of the individual  
c. Do not allow the health care worker to ever choose whom they serve  
d. Are guided by the Principles of Ethics of the AMA

8. **The low rate of completed advance directives may be attributed to:**

a. Poor explanations by primary care physicians  
b. Complexity of the forms  
c. Different state requirements  
d. All of the above

9. **At the end of life, several studies indicate:**

a. Most patients want aggressive care  
b. Patients with advance directives are likely to die in a hospital  
c. Over 90% prioritize comfort care  
d. There is no need for standardization or further legislation as the system works well

10. **Reasons given for the unwillingness of physicians to comply with DNR orders are least likely to include:**

a. Concern over legal issues  
b. Concern that the patient lacks sufficient medical knowledge to understand the situation  
c. An overall negative attitude toward advance directives  
d. Concern over hospital costs