Ethical Issues in the Intensive Care Unit

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INTRODUCTION

As scientific discovery and advances in technology continually alter the practice of medicine, perceptions of the limits of medicine by the public and by the medical profession itself also are changed. Sophisticated medical practice in an intensive care unit (ICU) has made recovery possible for many patients with critical illnesses who previously would have died. However, even the most advanced technology has its limits and consequences. The same ICU interventions that allow some patients to survive may merely prolong the dying process of others. In the latter cases, the patient or patient’s families may not perceive these life-sustaining interventions as beneficial.1 Health care providers in ICUs must therefore be knowledgeable not only about how and when to use various life-sustaining therapies, but also about when it is ethically appropriate to withhold or withdraw them.

Discussions about withholding or withdrawing care in the ICU can be a source of miscommunication, misunderstanding, and conflict. Resolution of these conflicts generally involves taking into consideration relevant ethical issues, the patient’s preferences, opinions of surrogate decision makers, duties of physicians, and societal concerns about the fair and efficient allocation of medical resources. Understanding the basic principles of bioethics and their application to end-of-life decision making can help ICU clinicians in analyzing and resolving the ethical dilemmas and other conflicts that arise. The basic principles (values) of bioethics include respect for patient autonomy, beneficence, nonmaleficence, and justice2,3 (Figure).

CASE PRESENTATION

INITIAL PRESENTATION AND HISTORY

A 52-year-old man is admitted to the ICU with a 2-day history of bloody emesis and black tarry stools. The patient reports a 5-day history of right upper quadrant and epigastric abdominal pain associated with anorexia, nausea, and nonbilious emesis. Two days prior to admission, he noted frank bloody emesis and black tarry stools. He also notes the recent onset of pruritus and jaundice as well as a 30-lb weight loss over the past 5 months.

His past medical history is significant for former crack cocaine and heroin use and hepatitis C. He has not seen his primary care physician for over 7 years. He denies any drug allergies and is not currently taking any medications. He has never been married and is not currently sexually active. Since being discharged from drug rehabilitation 2 years ago, he has lived with his mother. He denies any recent drug use and has never smoked cigarettes or consumed a significant amount of alcohol.

PHYSICAL EXAMINATION

Physical examination reveals a jaundiced, cachectic man with a temperature of 98.9°F, pulse of 103 bpm, blood pressure of 89/60 mm Hg with a further fall upon sitting up, and normal respiratory rate. He has scleral icterus with normal pupils. Oral examination reveals buccal jaundice but no oral lesions. His neck is supple with no palpable lymphadenopathy. Examination of the heart and lungs is unremarkable. Bowel sounds are normal, but abdominal examination reveals an approximately 8 × 10 cm mass in the right upper quadrant. This mass is mildly tender to palpitation as is the epigastrium. There is no rebound or guarding. Rectal examination reveals tarry black stool that is heme-positive. Trace bilateral lower extremity edema is noted. The patient is somnolent but easily arousable and interactive. He is oriented to person and place but not to time. During his initial evaluation in the emergency department, he has 2 episodes of hematemesis of approximately 50 mL each. The patient is admitted to the ICU.

LABORATORY EVALUATION AND HOSPITAL COURSE

The patient’s laboratory results are notable for a hemoglobin measurement of 7.3 g/dL with normal white blood cell and platelet counts. Other values are as follows: sodium, 133 mEq/L; potassium, 5.4 mEq/L; bicarbonate, 16 mEq/L; blood urea nitrogen, 35 mg/dL; and creatinine, 3.4 mg/dL. The total bilirubin level is 15.3 mg/dL, with a direct bilirubin of 12.4 mg/dL. The
aspartate aminotransferase level is 2031 U/L, alanine aminotransferase is 612 U/L, and alkaline phosphatase is 781 U/L. His international normalized ratio is 4.5, and serum ammonia level is elevated at 57 µmol/L. Serum amylase and lipase levels are normal. A comprehensive toxicology screen, including alcohol and acetaminophen level, is negative.

The ICU team orders blood transfusions and administration of fresh frozen plasma and vitamin K. They consult the gastroenterology (GI) service, which recommends urgent esophagoduodenoscopy (EGD). Because of the patient’s active bleeding, however, they want him intubated for airway protection before the procedure.

- How should one approach obtaining consent for these procedures?
- How can respect for patient autonomy be preserved in situations when the patient is unable to give or refuse consent for life-sustaining medical care?

**Preserving Patient Autonomy**

**Assessment of Decision-Making Capacity**

Reflecting the overriding influence that respect for patient autonomy has in American society and medicine, an appropriately informed adult with decision-making capacity has the legal and ethical right to refuse any medical interventions, including life-sustaining ones.\(^1\)\(^-\)\(^6\) Fundamental to the concept of respect for autonomy is the stipulation that the patient must have capacity to make medical decisions.\(^5\)\(^,\)\(^7\) Distinction should be made between the terms competency and capacity. Competency is a legal term. An adult is legally competent unless a court of law has determined otherwise. Children and minors automatically lack competency. In contrast, capacity is a functional determination that the patient’s physician makes. It often varies over time as the patient’s medical condition changes.\(^3\)\(^,\)\(^8\)

Clinical standards are used to determine decision-making capacity (Table 1). First, patients should be able to comprehend information relevant to the decision. Second, patients should be able to compare alternatives of the decision with personal values and goals. Third, patients should be able to communicate in a consistent and meaningful manner.

| Ability to comprehend information relevant to the decision |
| Ability to compare alternatives of the decision with personal values and goals |
| Ability to communicate in a consistent and meaningful manner |

Surrogate Decision Makers

Patients in the ICU frequently lack the capacity to make decisions regarding their care. In such cases, respect for the patient’s autonomy can be preserved through the use of surrogate decision makers and advance directives, if available. Surrogates can be identified in various ways. Ideally, the patient who has been designated her surrogate decision maker can discuss who should be the patient’sSee for this purpose. Ideally, the patient will be able to designate her surrogate decision maker clearly in the patient’s medical record in a progress or admission note.

A formal way to designate a surrogate is by creating an advance directive such as durable power of attorney for health care (health care power of attorney). This is a legal document made by the patient while in possession of decision-making capacity that designates another person to make medical decisions when the patient loses decision-making capacity. Such proxy directives do not require that a patient be terminally ill to take effect. It is best if such a directive explicitly states that the surrogate is empowered to make decisions to withhold or withdraw life support compared to just to make “medical decisions.” Health care power of attorney establishes an individual who has legal authority to interact with the health care team on behalf of the patient and to make decisions for the patient with potentially the same legal force the patient himself or herself has when capable.

Because patients often do not formally designate a surrogate before losing capacity, many states have created statutes that establish a legal hierarchy of the order of selection for such surrogates. In general, this will be the closest family member (e.g., spouse, parent, adult child). In states without such a statute, the ICU physician, with input from the patient’s personal physician and family members or friends, is responsible for identifying the most appropriate surrogate(s). Ideally, this should be someone who is close to the patient, who is willing to serve in this role, and who knows the patient’s preferences regarding the use of life support under various circumstances or, lacking that information, who knows the patient’s life values and goals.

At ICU admission, the ICU team and family members of a patient lacking decision-making capacity should discuss who should be the patient’s surrogate decision maker, based on the above criteria. When no one who knows the patient can be found to serve as a proxy, physicians should follow their institution’s policy to try to find an appropriate person to serve in that role.

In institutions lacking such policies, they should consult the hospital’s legal counsel or ethics committee or both.

The duty of a surrogate decision maker is to make medical decisions based on what the patient would have wanted in the same situation. This is referred to as the substituted judgment standard. In some instances, the patient will have discussed her values and wishes with the surrogate prior to admission to the hospital or ICU. It is important that the surrogate base decisions on the known preferences of the patient and not his own preferences, since the surrogate may hold differing values regarding such decisions were they to be made for himself. In other instances, the patient may have made an oral or written advance directive about these preferences. In an instructional advance directive, the patient, when capable, makes a statement about how treatment decisions should be made in the future if she loses decision-making capacity. A living will is a legally sanctioned written document in which a patient can articulate in advance her preferences for medical care. Although many are too ambiguous or sometimes too prescriptive, living wills can often provide guidance to ICU health care providers and surrogate decision makers about the patient’s preferences and attitudes regarding life-sustaining interventions. A living will is more helpful if the patient has discussed her preferences for medical care under various circumstances with family members and her personal physician. The personal physician can discuss preferences for future situations that may be much more medically realistic than survival in a persistent vegetative state. In such cases, the patient may communicate a categorical refusal for a specific medical treatment, such as chemotherapy, dialysis, or mechanical ventilation.

In cases where there is no prior knowledge of the patient’s preferences, the ICU health care team, other physicians involved with the patient, and the surrogate decision maker should jointly decide based on what would be best for the patient. This is referred to as the best interests standard. It is done by weighing the benefits and burdens of various medical interventions and choosing those whose benefits outweigh their burdens.

Informed Consent

After establishing that the patient has decision-making capacity or, if not, identifying an appropriate surrogate decision maker(s), the ICU team should discuss their recommendations for diagnosis and management. When appropriate, they should obtain informed consent or refusal for their recommended intervention(s). Informed consent or refusal for a proposed course of medical care involves discussion of key elements in order to make the patient’s (or surrogate’s)
decision truly autonomous, (Table 2). Health care providers should guard against coercion to accept or refuse treatments. Pressure may come from the health care team or family members whose beliefs or goals differ from the patient’s.

In the process of obtaining informed consent, the ICU physician should present the recommended intervention and its alternatives along with the rationale for his or her recommendation. Note that this is different from presenting a neutral menu of alternatives and then saying to the patient or surrogate, “You decide.” Merely laying out a list of choices without recommendations can lead to confusion or, even worse, the perception that the physician is unconcerned about the patient’s welfare. If the patient or surrogate is appropriately informed and free of coercion, then he or she has the legal and ethical right to refuse the proposed course of care, even if that decision is likely to result in the patient’s death.

In such cases when patients unexpectedly experience acute life-threatening illness or injury, consent for life-saving interventions often is presumed (ie, when doing otherwise puts “life or limb” at risk). A general rule of ICU care is to “err on the side of life” and provide the intervention immediately. However, an important proviso of this rule is that one must be willing to withdraw the intervention later if the patient or surrogate decides against it.

CASE PATIENT: FURTHER ASSESSMENT

The patient is judged to have capacity to make his own medical decisions and gives informed consent for the EGD. He also consents to being intubated, which is described as a temporary period of intubation and ventilation needed for airway protection during and immediately after the EGD. He then undergoes intubation and EGD without problems. EGD reveals 2 bleeding gastric ulcers and several grade III bleeding varices in the esophagus. The GI team cauterizes the gastric ulcers and bands the varices. However, the following morning the patient bleeds again. Another EGD reveals bleeding varices, which are again treated by banding.

He remains intubated because of poor mental status, which is attributed to the effects of sedatives and opioids that he received for the EGDs and to control agitation on the ventilator. Meanwhile, the patient’s liver function tests worsen, and an abdominal ultrasound evaluation reveals a large hepatic mass. Magnetic resonance imaging of the abdomen confirms 2 large intrahepatic tumor-like masses, averaging 8 × 11 × 12 cm, as well as at least 8 smaller lesions in the liver. These are most consistent with a diagnosis of multifocal hepatocellular carcinoma. The portal vein is completely occluded, which is the likely explanation for the patient’s fulminant liver failure and varices. Testing shows a markedly elevated α-fetoprotein level at 27,960 U/L. Because of the size and extent of the masses, the patient is not a candidate for liver transplantation.

The patient’s renal function worsens over the next 24 hours and he becomes anuric. His GI bleeding continues and he receives large volumes of blood and fresh frozen plasma each day. Pulmonary edema and increasing oxygen requirements ensue and the patient remains mechanically ventilated. Although he has not received sedation for the past 2 days, the patient does not respond to voice or pain.

- What ethical issues must be considered when making decisions about forgoing life-sustaining interventions?
- What are the ethics related to futile medical care and allocation of limited resources?

ETHICS AND LIFE-SUSTAINING INTERVENTIONS

Forgoing Further Care

One approach to understanding ethical issues related to decisions to forgo life support is to refer to the 4 basic principles (values) of medical ethics (Figure). When applied to end-of-life decisions, these principles often conflict and result in ethical dilemmas. In an ethical dilemma (defined as being ethically obligated to do x and y but precluded by circumstances from doing both),2 as a result of acting in accord with the overriding ethical duty, generally respect for patient autonomy, one’s actions will not be in accord with the competing

Table 2. Elements of Informed Consent for Interventions in the Intensive Care Unit

<table>
<thead>
<tr>
<th>Question</th>
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<tbody>
<tr>
<td>What are the patient’s relevant medical diagnoses?</td>
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<tr>
<td>What is the intervention proposed?</td>
</tr>
<tr>
<td>What is the purpose of the intervention and its benefits, risks, and burdens?</td>
</tr>
<tr>
<td>What are the likely or important consequences of withholding it?</td>
</tr>
<tr>
<td>What are the alternatives to forgoing it?</td>
</tr>
<tr>
<td>What are the likely or important consequences of these alternatives?</td>
</tr>
<tr>
<td>Is the patient free of coercion?</td>
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Ethical duty. ICU physicians must carefully apply the specific patient’s preferences to her current and likely future clinical situation.

Beneficence (being of benefit to the patient) and non-maleficence (doing no harm to the patient) embody some of the traditional duties of physicians. The current scope of a physician’s responsibilities includes (1) preserving the patient’s life, health, and well-being, (2) alleviating pain and suffering (which may conflict with a duty to prolong life), and (3) providing care that respects the patient’s autonomy (in contrast to the paternalistic tradition of medical practitioners). In performing the latter duty, physicians should strive to help patients attain their own interests and goals as determined by the patient and not by the physician.

Currently, the “benefit” that physicians provide for their patients is inextricably related to the patient’s personal values and life goals. As such, physicians may bring benefit to their patient on several levels. The first concerns the physiologic or biomedical benefit of a proposed intervention, which the physician usually defines for the patient. The second level is personal benefit, which relates to how patients interpret their options for care in the context of their personal values and goals. A patient’s faith and world view also may impact how he decides which goals for health care are worthwhile. The ICU physician should take these biopsychosocial aspects of caring for the patient into account when considering recommendations for further care. However, a patient’s autonomy is not without limits. Although it gives capable and informed patients and surrogates the right to accept or refuse treatment, it does not give them the right to demand interventions that are not acceptable medical practices.

Futile Medical Care

The problem with putting the concept of medical futility into practice is that the term futility has inherent ambiguities regarding its definition and how to consistently and fairly apply it. Treatments should be labeled as futile only if they cannot accomplish their intended goal. Conflicts can arise, however, when there are disagreements about what these goals should be and whether they are appropriate. In this regard, it is sometimes helpful to distinguish between physiologic and medical futility.

An intervention that is physiologically futile fails to achieve the desired physiologic function as an endpoint. For example, cardiopulmonary resuscitation (CPR) is physiologically futile at the point when the code team stops a resuscitation attempt after 30 minutes have elapsed and no spontaneous circulation has returned. At that point, it is acknowledged that that further CPR will not work (ie, it is physiologically futile). CPR also can be considered physiologically futile in a patient whose heart arrests while he is being treated for refractory septic shock. In this setting, the cardiac arrest occurs despite maximal appropriate treatments, including vasopressors. As such, CPR has essentially no chance of success in restoring a spontaneous circulation and blood pressure.

In contrast, therapy can be considered medically futile if the proposed intervention has a very low likelihood of resulting in meaningful survival for the patient. This definition is more problematic than physiologic futility. The concept of “meaningful survival” may vary depending on the patient’s personal values and goals for treatment outcome. To some individuals, remaining on a ventilator indefinitely may be a fate worse than death and lack meaning to them. Others may consider this acceptable and meaningful. Further complicating the concept of medical futility is the question about how low the probability of success has to be for an intervention to be considered futile. No universally accepted answer to this dilemma exists at this time. Some have suggested that futility should refer to zero successful outcomes in 100 patients. Others have proposed the use of ICU predictive scoring systems that predict the probability of survival, such as the Acute Physiology and Chronic Health Evaluation (APACHE) III. However, when applying such systems to individuals, one must use the information cautiously as a guide to prognosis rather than a statement of fact of outcome.

Different ICU providers may treat the concept of medical futility differently. They may use a broad range of probabilities for determining that success is highly unlikely or may apply their own viewpoints to define what is meaningful life for the patient. When a physician’s personal viewpoints cloud the diagnosis of futility, the use of medical futility becomes morally problematic. Surrogates and physicians may not always agree on what the appropriate treatment goals should be or whether there is an insufficient probability of an intervention’s success at accomplishing these goals. Such conflicts reflect differences in values and not necessarily in facts. For this reason, some ICU clinicians and bioethicists advocate against the routine application of the concept of medical futility to end-of-life decisions in the ICU. Treatments unlikely to be beneficial or of uncertain efficacy may be considered inappropriate and hence inadvisable, but heed should be taken when labeling such measures as futile. If one does want to
base a decision on medical futility, one should have an explicit institutional policy to do so. Respect for autonomy and due process requires disclosure of a decision made on this basis to the surrogate(s) as well as disclosure of the availability for appeal and review.5,17,20

Ethics of Allocating Limited Resources

In the face of rising costs of health care as well as striking inequalities in access to medical services, many have raised concerns about the fair and efficient distribution of medical resources. Some argue that the patient’s treating physicians should make rationing decisions to limit consumption of a scarce or expensive resource. However, the treating physician has a professional duty to the patient to provide medically appropriate treatment in accord with the principles of beneficence, nonmaleficence, and respect for autonomy. In contrast, others say that allocation decisions should be made at the institutional level and not at the bedside. An example of this approach is the use of a hospital formulary with special approval requirements and other restrictions on the use of expensive antibiotics.

One can imagine examples that challenge this prohibition against individual physicians rationing resources at the ICU bedside. Consider the case of a patient who has refused surgery for persistent diverticular bleeding but still wants blood transfusions. If she is requiring nearly constant transfusions of blood to keep up with her bleeding, at what point and on what grounds is it ethically acceptable to stop transfusing her? In this situation, her physicians face an ethical dilemma. On the one hand, as treating physicians, they are obligated to respect the patient’s decision and preserve life. On the other hand, society expects physicians to act as good stewards of society’s limited resources. The problem with the latter is that there are no currently accepted societal standards in place to help physicians decide how to distribute limited resources. Without societal standards, the high likelihood that personal or local values may unfairly influence the decisions makes bedside rationing morally problematic. Thus, until publicly accepted guidelines for the distribution of limited medical resources emerge, physicians are obligated to serve primarily as advocates for their individual patients.16 However, as noted before, physicians are not obligated to provide futile therapy, and patients do not have the unqualified right to demand therapy that falls outside of appropriate medical practice or consumes an extraordinary amount of limited resources. In the above case scenario, physicians could use some of these considerations as ethical justification for stopping the blood transfusions.

- What factors should one consider in deciding whether to withhold or withdraw care in this patient?

Withholding and Withdrawal of Life Support: A Step-Wise Approach

Step 1. Determine if the ICU patient has decision-making capacity. Much more often than not, patients in the ICU lack capacity for making medical decisions.10 The cause is multifactorial: underlying diseases, metabolic disturbances, pain, sleep deprivation, delirium, and sedatives and analgesics. If a patient lacks capacity, one should identify an appropriate surrogate decision maker, as discussed earlier. One should emphasize to the surrogates that his role is to make decisions on behalf of the patient based on the patient’s values, goals, beliefs, or previously stated preferences. If the surrogate is unaware of the patient’s preferences for medical care, the ICU team (physicians and nurses) and surrogate should work together to decide what would be in the best interests of the patient.5,13,21 The steps below assume that the patient lacks capacity and the ICU team and the patient’s surrogate share medical decision making.

Step 2. Determine if the patient expressed her preferences for medical care before ICU admission. Ideally, a patient will have discussed her preferences regarding end-of-life or intensive care with her primary care physician prior to admission to the ICU while still an outpatient. In this setting, the physician can broach the subject in a more relaxed environment than the ICU. The patient’s preferences for life support can be integrated into the context of the individual’s overall health care plan so that both are in accord with her values and life goals. In addition, under ideal circumstances the patient will have executed an advance directive (living will) and identified a surrogate decision maker (durable power of attorney for health care). When possible, the patient’s outpatient physician should have encouraged discussions about end-of-life care under the specific circumstances that one could realistically anticipate based on the patient’s medical condition and prognosis. For example, would a patient with advanced chronic obstructive pulmonary disease (COPD) who has been previously intubated want to be intubated again? If so, under what circumstances? For how long? What if she is not weaned from the ventilator after a week with little prospect for breathing off the ventilator?5,8,13,21

Step 3. Establish trust and effective communication with the surrogate and other family members. The ICU team should keep the surrogate apprised of the patient’s medical condition, changes in this condition, and long- and short-term prognoses. The ICU team
should hold “family meetings” with the surrogate and other family members early and often. Starting such discussions early in the ICU course helps the health care team to better appreciate the patient’s values and goals for care. They also may gain insight into any potential blocks to good communication due to psychological issues or family dynamics. Likewise, early communication helps the surrogate to emotionally adjust to changes in the patient’s condition and continually re-evaluate and guide goals for therapy. Discussions should be honest yet compassionate, informative, and consistent. They should be presented at a level of detail that is appropriate for the surrogate decision maker to understand. Families should be encouraged to ask questions and voice their concerns. When large families are present, it is useful to identify one person to serve as a spokesperson for the family as well as the primary person to receive information about the patient’s condition (this spokesperson may or may not be the surrogate).

**Step 4. Confirm that the goals of therapy early after ICU admission are appropriate.** Within the first 2 to 3 days after ICU admission, the ICU team should discuss current therapy and its goals with the surrogate. They should ask the surrogate if he thinks that the patient would want the current ICU treatment and plan and should routinely check with the surrogate and family that the patient really would want the level of interventions that automatically come with an ICU admission. They can accomplish this, for example, by saying, “We want to do the right thing for your loved one, the right thing being what he or she would have wanted done.” If a patient has an advance directive, it should be reviewed at this time and any ambiguities clarified. For example, if a patient’s living will states that life support should be withdrawn in the event that there is no reasonable hope for meaningful recovery, it would be helpful for the ICU team to know what she meant by “reasonable” and “meaningful recovery” to take these into account in their treatment plan and recommendations.

**Step 5. Continue to convey to the surrogate and family the patient’s prognosis and its uncertainties.** As a rule, the ICU team should review with the family the patient’s medical condition and prognosis. They should be sure to plainly state that the patient is critically ill or has a life-threatening condition (if that is the case). Obviously, the poorer the prognosis, the more important such honest yet compassionate conversations with surrogate and family become. If death is imminent or expected, then the ICU team must share that with the surrogate and family without delay for several reasons: to jointly decide on an end-of-life care plan in which the goals for therapy may change from “cure” to “comfort” and to allow family to prepare for the patient’s death. For example, they may want to alert other family members to come to the ICU soon. If the patient’s condition is so poor that further therapy seems futile, the ICU team should share this with the family and then discuss their recommendation to withhold such futile care from this point forward. Often the family will agree with the recommendations when so informed in this manner.

**Step 6. Base recommendations for further care on as complete an understanding of the patient’s medical condition, prognosis, and preferences for treatment as possible.** The patient’s ICU attending physician should solicit the opinions of all ICU team members, including house staff and nurses, consultants, and, if possible, the patient’s primary care physician, in order to reach a consensus before presenting recommendations to the surrogate or family. It is helpful to first consider if, at the present time, the intervention in question is medically indicated and likely to be beneficial to the patient. Physiologically futile measures should not be offered as an option. If an intervention is very unlikely to provide meaningful survival to the patient, it should be presented as inadvisable to the decision maker(s) and, if already started, its continuation called into question. Next, if an intervention is determined to be medically appropriate and is likely to have some benefit for the patient, consideration should be given to whether this is something the patient would have wanted. An appropriate surrogate has the ethical and legal right to refuse all health care, even if death is the result.

If an intervention is not futile and the patient’s wishes are unknown, determination of whether the intervention is in the patient’s best interests should be made. This involves weighing the likely benefits and burdens of the proposed intervention. If the benefits of therapy outweigh the burdens, the intervention should be offered. If the burdens outweigh the benefits, the therapy should not be recommended.

External factors also may need to be considered. For example, a patient may desire to remain alive for a period of time awaiting an important personal event, such as the arrival of a distant family member or birth of a grandchild. Additionally, legal or institutional policy may be in conflict with the proposed course of care, such as withholding or withdrawing life support on the basis of futility, and should be investigated prior to making recommendations.

- Is a therapeutic trial of an intervention indicated when its efficacy is uncertain?
In ICU patients, effects of interventions are often uncertain. For example, an elderly man with advanced COPD may develop bilobar pneumonia with severe dyspnea and hypercapnia not responsive to noninvasive ventilation. In this situation, his physician may consider intubation and assisted ventilation but may grapple with the concern that the patient may never be weaned from the ventilator given his underlying illness. When dealing with such dilemmas, it is important to remember that there is no legal or ethical distinction between withholding and withdrawing care.4,5 This lack of distinction supports use of a therapeutic trial of the intervention in question when efficacy is uncertain. If continued mechanical ventilation is contrary to the capable patient’s preference, it can be withdrawn at a later time. This being said, surrogates may have more psychological difficulty withdrawing care than withholding it. For this reason, therapeutic trials and when they should be stopped if ineffective should be discussed with the patient or surrogates beforehand whenever possible.3,12

• How should the ICU team’s recommendations be presented to the patient’s surrogate or family?

The health care team should meet with the family to discuss these recommendations. As a rule, the attending physician is the most appropriate spokesperson. During the discussion, the proposed changes in plan should be clearly outlined, the basis for the decision explained, and a brief review of how the proposed measures would be carried out addressed. Questions should be encouraged and answered thoughtfully and respectfully. Care should be taken to explain that the withholding or withdrawing of life support would not mean abandoning the patient. Measures that will be taken to ensure the patient’s comfort and to prevent pain and suffering should be carefully explained and agreed upon. As much as possible, patients or surrogates should be given a reasonable amount of time to consider the recommendations before being expected to respond.9,13,22,23

CASE PATIENT: FAMILY CONSULTATION

In light of the patient’s terminal prognosis, the ICU team schedules a family meeting. After discussing in detail the patient’s current condition and prognosis, the ICU attending physician recommends that the goals of therapy be changed from prolonging the patient’s life to comfort measures. To this end, she recommends that further treatment, including blood transfusions, be withheld and that the family should consider whether the patient would want life support continued if he will never recover. The patient’s 2 sisters want to withdraw care and implement comfort measures only. The patient’s mother, however, does not agree. Having lost a daughter to liver disease 2 years ago, she is unwilling to accept the patient’s terminal condition and grim prognosis. She insists that “everything be done” and asks about starting dialysis for the patient’s renal failure.

• What measures can help to resolve this conflict?
• What factors must be considered when carrying out withdrawal of life support from this patient?

WITHDRAWING LIFE SUPPORT

Resolving Conflicts

It is difficult when a patient or family member demands an intervention that the physician does not consider to be medically indicated or beneficial to the patient. Disagreement among various family members involved in decision making further complicates the process of deciding to withhold or withdraw various interventions. When these situations occur, the ICU team should first reevaluate their recommendations to ensure that they were indeed appropriate and communicated clearly. It is also important to clarify with the family what their interpretation of the recommendations were and what their wishes are. For example, sometimes a plea to “do everything” may not actually be a request for every conceivable medical intervention but actually a wish that everything be done to ensure patient comfort. At other times, surrogates may agree with some aspects of the physician’s recommendation but not others. For instance, they may agree to withholding attempts at CPR but not to withdrawing the ventilator.

The feelings of the family members also should be solicited. Emotions often run high when dealing with end-of-life issues, and family dynamics in these situations can often be complex. There may be unresolved feelings of guilt, anger, or denial brewing beneath the surface of family interactions, particularly when family have been estranged from the patient prior to admission. Such feelings should be investigated and explored as they may hinder a person’s ability to act in the best interests of the patient. When these feelings are confronted and dealt with in a sensitive and honest fashion, family members often are able to put these obstacles behind them and enter into more objective discussions about reasonable goals for patient care. Additionally, when a patient who is young or previously healthy becomes acutely ill and his/her condition deteriorates rapidly, families may simply need more time to accept and cope with the tragedy of a terminal prognosis.
If the above measures fail, the health care team can enlist the help of the hospital's ethics committee, a hospital chaplain, or other counseling services. With effort and patience, the vast majority of conflicts can be resolved through further discussions and the passage of time without clinical improvement. Only rarely should it be necessary to resolve in court conflicts over withholding or withdrawing life support.

If the care team still cannot reach agreement with the surrogate decision maker after using the preceding steps, interventions judged futile can be withheld without the approval of the family if institutional policy permits. Such a step should not be taken lightly and should only be done after input and concurrence is obtained from all members of the health care team and appropriate consultants. If the surrogate continues to object to this position, the hospital ethics committee should be consulted before acting based on futility. They should be able to confirm that the decision-making process was ethically sound, that the patient meets the institution’s criteria for futility, and that the institution’s policy is being followed properly. Full disclosure should be made to the surrogate decision-maker(s) about decisions made on this basis, and, if feasible, the family should be given the opportunity to transfer care to a physician who is willing to provide the disputed intervention(s).

Types of “Do Not Resuscitate” Orders

Once a decision has been reached between the patient or surrogate and ICU health care team to limit or withdraw medical interventions, the desired level of support must be defined and documented. This usually is accomplished by creating a “Do not resuscitate” (DNR) order. A DNR order, however, often encompasses more than just CPR; it can refer to withholding or withdrawing many different life-sustaining therapies, such as mechanical ventilation, vasopressors, dialysis, antibiotics, fluids, blood products, and parenteral nutrition. Discussing the benefit of each of these interventions individually with the patient or surrogate can be overwhelming for both the physician and the decision maker. Thus, it is often useful to first determine the overall goal of therapy that should apply to the patient. From this decision, one can determine which treatments are compatible with the defined goal and which are not. An example of this approach consisting of 3 levels of limiting treatment as defined by DNR orders is provided in Table 3.

### Table 3. Levels of “Do Not Resuscitate” Orders

<table>
<thead>
<tr>
<th>Level</th>
<th>Definition of Therapy</th>
<th>Description and Goals of Therapy</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>All therapies but no CPR</td>
<td>The patient will be treated as medically indicated, including all efforts to prevent cardiac or respiratory arrest. However, if such an arrest occurs, no resuscitative efforts will be made. This order should be reviewed prior to all operative procedures and may be temporarily suspended during or immediately after such procedures based on outcome of discussions by members of the operative team and the patient (or surrogate decision maker).</td>
</tr>
<tr>
<td>B</td>
<td>Limited therapy; no CPR</td>
<td>Therapy already begun will be continued as medically indicated. In general, no additional treatment will be added except for providing comfort to the patient. If cardiopulmonary arrest occurs, no resuscitative efforts will be made.</td>
</tr>
<tr>
<td>C</td>
<td>Comfort measures only</td>
<td>Treatment will be limited to nursing and medical therapy appropriate for hygiene and comfort. In general, treatment needed for comfort will be given even if it depresses cardiac or respiratory function. Life-sustaining therapies already started may be discontinued by written order.</td>
</tr>
</tbody>
</table>


### Withdrawing Care

If a life-sustaining intervention such as mechanical ventilation is going to be withdrawn, comfort measures, such as the administration of sedatives or analgesics or both, should be initiated prior to stopping assisted ventilation to ensure patient comfort. Such palliative measures are considered both legal and ethical, even though they may hasten the moment of death. The key to understanding this seemingly contradictory concept (referred to as the rule or doctrine of double effect) is to consider the intent with which these medications are given. The aim of palliative therapy is to relieve the pain and suffering of dying, which is consistent with the principle of beneficence. The secondary consequence of
this action, hastening death, is considered acceptable in this context. In contrast, the aim of active euthanasia is to give the patient a lethal agent with the intent of causing the patient’s death. Active euthanasia is illegal in all US states.

In general, unless specific exceptions have been agreed upon in advance, the patient should only receive treatments consistent with the decision to withdraw life support. For example, blood gas measurements need not be obtained in a patient who has been withdrawn from the ventilator. This being said, there are cases where a surrogate may authorize the discontinuation of dialysis, antibiotics, and pressors and withholding of CPR but not the withdrawal of mechanical ventilation. The health care team should respect these preferences.

Prior to the withdrawal of life support, any health care team member who is morally or otherwise uneasy with participating should be excused. Family members should be asked whether they would like to stay with the patient until the moment of death. ICU staff members as well as a hospital chaplain if desired by the family should be available to provide emotional support to the family. In general, if death is expected to be imminent after forgoing life support, the patient should not be transferred out of the ICU. ICU staff may be needed to titrate palliative medications to effective doses as well as provide continuity of care and emotional support to the patient and family.

CASE PATIENT: CONCLUSION

Further discussions with the patient’s family reveal that the mother is having difficulty dealing with the death of her oldest daughter from liver disease. The mother cannot accept her son’s current condition and terminal prognosis. The hospital chaplain is asked to meet with the family and discuss their emotional and spiritual concerns. In accord with the mother’s position, no new therapy, such as dialysis, is added but those in place are continued (DNR Level B in Table 3). Two days later, the mother approaches the health care team saying she is now ready to withdraw life support from her son. The ICU attending physician enters the order for withdrawal of the ventilator and palliative care measures (DNR Level C in Table 3). Palliative care is provided by giving the patient an intravenous bolus of 10 mg of morphine and by starting a morphine drip that is to be titrated to ensure the patient’s comfort. The patient is extubated, and with all his family at his bedside, the patient dies peacefully 4 hours later.

REFERENCES


