Issues in Surgical Ethics

Looking beyond the crystal ball: An ethical dilemma in advance directive implementation in multidisciplinary patient care

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Advance Directive Implementation: CME objectives

The learning objectives provided by this ethical challenge deal with the postoperative management of patients with advance directives and the multiple dynamics that contribute to a complex and often unclear system that can significantly impact medical and surgical treatment decisions and satisfactory communication between physicians, patients, and families. These include understanding the ethical principles involved in (1) A fundamental cultural paradigm often associated with surgery and its effect on interactions or conflict with other medical specialties, especially regarding goals of care; (2) The appropriate allocation of medical and intensive care unit resources; (3) The growing necessity of team hand-offs with the inherent consequences of loss of information; and (4) The overall implementation of advance directives in accordance with institutional policies.

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CASE SCENARIO

A 75-YEAR-OLD MAN with early-stage prostate cancer presents to the emergency department for recent progressive shortness of breath, peripheral edema, and fatigue. Diagnostic measures are undertaken, and symptomatic therapy is initiated with good response. On arrival to the ward, the patient presents an advance directive to the admitting team that states he does not wish to have cardiopulmonary resuscitation (CPR) performed under any circumstance. He states that he "has lived a good life" and that he "would never want to need life support"; until now, the patient has enjoyed a physically active lifestyle and has always been very involved in his family and community. The patient's wishes are documented accordingly in the electronic medical record. He is diagnosed subsequently with new-onset congestive heart failure, and echocardiography shows severe aortic valve stenosis and mildly impaired left ventricular ejection fraction at 40%; additionally, a coronary angiogram shows 90% occlusion of the left anterior descending artery. As the patient's symptoms resolve on medical therapy, the cardiac surgery team is consulted regarding definitive treatment. The surgeons feel as though operative management with valvular replacement and a coronary artery bypass graft is a viable option that may improve the patient's long-term survival, and after discussion of the risks and benefits of the procedure, the patient consents to undergo the operation without delay.

No obvious discussion regarding modification of the advance directive is evident from the medical record, and the directive is not modified further when addressing the perioperative period. The planned operation is completed without complications, and the patient's recovery proceeds well. On postoperative day 3, because of a hospital bed shortage in the cardiac surgery intensive care unit, he is considered sufficiently stable on clinical evaluation to be transferred to the medical intensive care unit, although the cardiac surgery service will remain his primary team. That evening, the patient complains of sudden light-headedness and chest discomfort, and an electrocardiogram rhythm strip demonstrates ventricular tachycardia. Over the course of a few minutes, the patient loses consciousness, and his blood pressure deteriorates quickly. The cardiac monitor continues to show ventricular tachycardia. The internal medicine resident on service in the intensive care unit notes the patient's advance directive and "do not resuscitate" request during rapid review of the chart and must decide what treatment, if any, to provide.

THE ETHICAL DILEMMA

The patient has noted explicitly his refusal of aggressive treatments in the event of cardiac arrest or other conditions that would require cardiopulmonary resuscitation; however, arrhythmias occur commonly in the postoperative setting, especially in the context of the patient's open-heart procedure and are potentially recoverable with rapid intervention. The internal medicine resident who has only just met the patient must now choose between withholding treatment and attempting possible life-saving actions. This situation presents an ethical dilemma in that a physician who does not have an in-depth understanding of the patient's motivations is faced with previously recorded preferences that may have been made with minimal knowledge of potential outcomes; consequently, the physician must then find a balance between upholding patient autonomy and reacting to unpredictable clinical events. Four possible responses exist in this situation:

1. Withhold any aggressive resuscitation efforts (eg, cardiopulmonary resuscitation [CPR], intubation).
2. Begin CPR immediately and perform electrocardioversion.
3. Call the primary service (cardiac surgery) for emergent consultation.
4. Attempt to reach the patient's family or a surrogate decision maker.

BACKGROUND

During the last century, modern medicine has undergone countless drastic changes, both in the understanding of disease and in the delivery of health care. Across every medical specialty, major advances in treatment and in research have had a profound impact on improving patient care and extending quality of life, reflected directly by the increasing average age of the population in both developed and developing countries. The number of older persons (age 60 and older) is predicted to exceed the young for the first time in history by the year 2050.[1] This change has already begun to have a formidable effect on multiple aspects of society, ranging from economic to social to political. The swiftly progressing capabilities of medical technology to treat disease and to sustain life have sparked substantial ethical debate.