

Informed Consent and the Ethical Management of the Older Patient

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KEYWORDS

• Informed • Consent • Older • Ethical • Elderly • Management

A 79-year-old man presents with left femoral fracture for repair. His previous medical history is significant for hypertension, adult-onset diabetes, hyperlipidemia, cerebrovascular accident with residual right hemiplegia and hearing loss. He is oriented to place and person, yet appears somewhat confused and agitated, producing unclear mumbling, and sometimes not responding to questions. There are two consent forms on the patient's chart, one for a research protocol for an experimental hip prosthesis and the other for the surgical procedure and anesthesia. An 'X' is scribbled on the signature lines of both consent documents. The operating room nurse is processing the universal protocol and asks you if this represents adequate documentation for the surgery and spinal anesthesia.

Elderly patients are particularly vulnerable in the informed consent process. Not only are they more likely to suffer from medical conditions that can impair cognition by virtue of age, but they may also suffer from physical disabilities (such as hearing loss) that impair communication even when cognition is intact. Coercive social factors, such as physical dependency, financial impoverishment, restricted health care resources, and family pressures, can play important roles in preventing elderly patients from formulating or expressing truly autonomous decisions with regard to their health care. The anesthesiologist must bear two important questions in mind when obtaining consent from any patient: (1) Is this patient able to give informed consent?; (2) Is there a way I can promote this patient's ability to give informed consent?

Until recently, physicians all over the world held God-like authority over patients. That authority originated during ancient times when blind faith was often the primary instrument and prayer a principle option for treatment. Disclosure of medical

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information (eg, revealing a diagnosis of cancer) was considered by physicians to be excessive, unnecessary, and potentially harmful. In 1961, for example, only 12% of physicians would consider informing their oncological patients of the diagnosis.¹ By tradition, medical care was prescribed for the patient, but not really discussed with him or her.

This trust in doctors was compromised in the middle of the 20th century when Western society was shocked by information concerning human experimentation in Nazi concentration camps. Advances in medical technology were causing patients to question whether sustaining life at all costs was appropriate. As a result, primary assumptions regarding physician authority began to change. Today, when human rights are a priority in Western society, and ethical values in medicine have shifted from paternalism toward respect for patient autonomy, patients may no longer passively accept the decisions and advice of physicians, preferring to participate actively in making health care decisions. The concept of autonomy was brought to life by the ancient Greeks, who stated that people, unlike animals, are capable of ruling their own lives with responsibility and reason. Autonomy remained primarily a theoretical concept until the development of democracy as a political system, when autonomy acquired the meaning of the personal right to self-determination.

Modern Western medical ethics are based on principles of beneficence, nonmaleficence, respect for patient autonomy, and justice. Health care aims first to do good and promote well-being, and second to avoid causing harm and remove existing harm. In the framework of current medical ethics, promoting well-being is no longer necessarily measured by saving lives, but by preserving and promoting quality of life, a concept that relies on the patient's determination of what quality of life is. Thus, fulfilling the principle of beneficence also requires respecting the patient's wishes: in other words, respecting patient autonomy.

In the patient-doctor relationship, ethical principles state that a competent patient has the right to decide what should or should not be done to him or her. This principle was first firmly established as a legal right in the United States in the case of *Schloendorff v Society of New York Hospital*.² A woman who had agreed to undergo anesthesia for examination but had specifically refused surgery was nevertheless operated on while unconscious. She suffered a brachial plexus injury that eventually led to the amputation of fingers on one hand. She argued that she had not consented to the procedure, and that she would not have been injured if her wishes had been followed. Citing constitutional protection against noninterference and in favor of protection of privacy, the court sided with her. The decision was classically expressed by Justice Benjamin Cardozo: "Every human being of adult years and sound mind has a right to determine what shall be done with his own body; and a surgeon who performs an operation without his patient's consent commits an assault for which he is liable in damages." It is particularly relevant to the readers that the original case regarding medical consents in the United States was related to anesthesia and surgery.

The personal values of patients may differ significantly from the medical goals of treatment. For some Jehovah's Witness patients, for example, the medical goals of transfusion may be in direct and irresolvable conflict with spiritual values. Because physicians were resistant to accepting the rights of patients to refuse blood transfusions, the courts intervened, and the law has now long recognized the rights of competent adult Jehovah's Witnesses to refuse blood.

In fact, any competent patient now has a legal right to refuse any medical intervention, for any reason, including no reason at all, even if that refusal appears to be absurd

or harmful from a doctor's point of view. The law requires that medical treatment or research be preceded by the informed consent of the patient, and failure to obtain informed consent is not only illegal, but also constitutes malpractice. Courts and public opinion have also defended the interests of infirm elderly people for whom a surrogate or health care proxy is making decisions. State regulations defining legally authorized representatives differ widely, with some jurisdictions failing to provide clear guidance.

ELEMENTS OF INFORMED CONSENT

"Informed consent" is a legal term that implies an autonomous, informed authorization by a patient to undergo a medical procedure or treatment. The physician cannot make medical decisions for a competent patient, but is obliged to provide the patient with accurate, meaningful, and relevant information so that the patient can make informed medical choices. The ethical principle of respect for autonomy further requires that physicians do whatever is possible to promote patient autonomy. Thus, when a patient suffers from reversible conditions that impair autonomy the physician has a duty to treat those conditions, provided treatment can be accomplished in a time frame that still allows anesthesia and surgical care to be meaningful.

Informed consent includes a proper discussion between a physician and a patient, and covers all relevant aspects of a proposed treatment. This discussion is usually documented in the patient's chart, although the note or signed consent form does not substitute for the conversation between the physician and patient. The formal signed consent form in the chart is not a universal legal requirement, but the discussion is considered mandatory.

The important elements of valid informed consent are:

1. **Voluntarism.** The consent to medical treatment should be given exclusively by the patient's free will, without coercion or undue influences and pressures.
2. **Disclosure.** The presentation of relevant and accurate information, including the nature of his or her illness, the proposed treatment and its risks and benefits, and all reasonable alternatives to proposed treatment, including no treatment at all.
3. **Competence** (the legal term for decision-making capacity; in medical texts, "capacity" is often used). To be considered competent, a person should be capable of the following: understanding the provided information, appreciating the remote consequences of the treatment, and making and expressing a reasoned medical choice.

Every adult patient is legally assumed to be competent of making informed medical care decisions, unless there is evidence to the contrary. It is important to realize that competence for medical consent is not a global but a task-specific quality. A person may not be competent to live independently, for example, but still be competent to decide whether or not he or she wants to receive a blood transfusion.

Although the informed consent process is usually straightforward, it nevertheless can have hidden pitfalls. For example, the physician, led by his own understanding of good and reason, may persuade the patient to make a choice that does not reflect the patient's true values. The patient's consent to treatment or to research may be given not by free will, but under influence of pain or anxiety, fear of bad treatment, or loss of independence. The patient may not be fully informed of the nature of treatment and may remain unaware of risks that he or she would not otherwise be willing to undertake. All these factors may violate respect for patient autonomy, or undermine autonomy itself.

SPECIAL PROBLEMS FACING ELDERLY PATIENTS IN THE CONSENT PROCESS

What constitutes old age is changing as patients remain healthier later in life. Elderly people of the 21st century may be healthier than ever, but they are also older than ever, and their number is growing. It is estimated that by 2030 one in five people will be older than 65 years, and that in 2050 in the United States the number of people who are 85 years and older will approximate 8.0 million.³

In the early 20th century an elective operation for inguinal hernia in a patient older than 50 years was frowned upon; nowadays people in their 70s may undertake cosmetic surgery, and octogenarians commonly undergo elective joint replacements and cardiac surgeries to improve their quality of life. As the population gets older, geriatric problems become common in all areas of modern medicine. Agism (discrimination or prejudice against the elderly population⁴), previously so common in society and medicine, has no place in modern health care.

Age is not a disease, and increase in biologic age per se does not indicate decreased brain function or neuronal loss. Nevertheless, aging is associated with a variety of changes. Advanced age is accompanied by increased risk of severe cognitive changes, such as those caused by Alzheimer's disease, Parkinson's disease, and organic brain damage following long-standing cardiovascular disorders. Almost 11% of those over the age of 65 years may suffer from Alzheimer's disease, and that number will continue to grow.⁵

Mental illness that affects decision-making capacity also creates significant difficulties in the process of informed consent. However, cognitive deficits and mental illness do not automatically indicate that a patient is unable to participate in his or her health care decisions. In fact, most patients with some degree of mental impairment are still capable of participating in medical decision-making and should not be treated against their will.

Many psychiatric disorders common in geriatric patients, such as depression, may affect understanding and the ability to express oneself, but studies in depressed patients reveal that decision-making capacity of these patients is usually intact, even if it appears otherwise.⁶ The same is true regarding memory impairment. A patient may have difficulties recalling the details of the process of informed consent, but that does not mean that he or she did not understand the information given during consent, or that the decision was not a competent one. Studies reveal a strong desire among hospitalized aging patients to receive detailed information regarding their health care,⁷ and efforts should be made to deliver that information in the most effective way.

Many elderly patients face difficult end-of-life problems and choices, such as the choice between palliative care and life-extending therapies. There may also be significant differences between their own desires and the interests of loved ones, who may suffer significant moral and financial burdens to care for the individual or who may stand to benefit emotionally or financially. The choice made by a geriatric patient might be perfectly reasoned in the settings of his or her specific personal values. However, this choice may appear unreasonable to a medical practitioner, especially if it contradicts the physician's understanding of "good," and opposes medical advice. Studies show that physicians often believe such patients to be incompetent, when that is actually not the case.⁶

Research shows that many terminally ill elderly patients prefer treatment that palliates suffering and provides comfort over life-extending therapies.^{8,9} On the other hand, physicians frequently underestimate the desire of aging patients to receive life-prolonging therapies. Patients also often rate their quality of life higher than do

caregivers or family members,¹⁰ and may be interested in intensive and aggressive treatment.¹¹ Such therapies, if they are desired, should not be denied to the patient based on his or her advanced age, but should be considered in light of the benefits and burdens imposed by the therapy. Physicians must avoid under treatment of elderly patients, as well as unwanted over treatment.

ASSESSING COMPETENCE OF A GERIATRIC PATIENT

Assessing competence in the geriatric patient population is complicated by many factors. Patients who are capable of making medical decisions may suffer communication difficulties because of their level of education, hearing or visual impairment, fear of the financial burdens of treatment, anxiety, or pain. While these problems also occur in younger patients, elderly patients more frequently suffer from medical comorbidities that contribute to such problems.

The unfamiliar environment of the hospital, noise and artificial lighting of the hospital wards, disturbance of routine sleeping and eating habits, and underlying disease might all contribute to significant confusion and agitation on the part of the patient. Specific problems such as expressive aphasia can cause great challenges in communication during the process of consent. When reversible problems impede the informed consent process, physicians are ethically obliged to try to reverse or mitigate these factors. Assessing understanding is also problematic. If a patient's ability to understand information is questionable, and the situation allows time for additional testing, quick cognitive assessment may be performed using simple tests such as the Mini-Mental State Examination (MMSE) or the Mini-Cog. However, even relatively low scores on these examinations do not preclude ability to undertake treatment-related decisions,⁷ and psychiatric consultation and competence assessment may be necessary. Many attempts to determine capacity have rested on retrospective instruments that inquire of the patient what they have been told, and many practitioners continue to use this as the standard. Thus, if it is clear that the patient does not understand what has been explained, then the physician has to try again or make the determination that the patient is not competent.

PROMOTING PATIENT AUTONOMY DURING THE INFORMED CONSENT PROCESS

In the informed consent process, the physician has an ethical obligation to promote autonomy and participation in medical decision-making to the degree that the patient is capable. Because different patients have different capabilities and challenges, the informed consent process requires an individualized approach, appropriate for the patient's level of education and understanding. Clearly there is no standard protocol for informed consent that will suit all.¹²

Barriers to communication, such as language differences, hearing loss, pain, anxiety, decreased mental capacity, and impaired ability to communicate should be specifically addressed, because they may mask a patient's ability to consent.¹³ If the patient is not fluent in the doctor's language, a medical interpreter may be necessary, and is often preferable to relying on a family member to interpret. Family members may have language limitations of their own, may not understand medical terms, and may also have conflicts relating to family culture and lines of authority.¹⁴ They may desire to soften important facts, and critical information may be deliberately or accidentally omitted. Furthermore, interpreting technically difficult and emotionally charged information for a sick family member imposes additional and unfair burdens upon loved ones during already difficult times. In some areas, professional translation

services have become mandatory so that even bilingual staff members cannot serve as translators.

Use of clear and slow speech with pauses between key phrases, understandable language, short sentences, and simple grammar are always useful in communicating complex information. A short but comprehensive explanation has a greater chance of being understood than one that is long and overly detailed.¹⁵ The physician should position him- or herself directly in front of the patient so that the patient can see the physician's face. Pain medications and anxiolytics should not be withheld in the setting of informed consent. Pain and anxiety can interfere with a patient's ability to process critical information. Withholding such therapies may result in a situation in which a patient who is suffering from pain appears to have been, or may actually have been, unduly influenced into consenting to obtain relieving medication.¹⁶ A consent obtained in this way violates the ethical and legal principles of informed consent. Providing aids to vision and hearing during the consent process, by allowing the patient to better see the physician's face and hear his or her voice, may aid communication and understanding. Aphasic or demented patients may require nontraditional methods of communication; gestures, pictures, and written key words might work better than spoken words.^{13,17} Involvement of family members in the discussion can be valuable; they might enhance consent quality by asking relevant questions that an aphasic patient is not able to articulate.¹⁷ Severe aphasia may necessitate consultation with a speech and language specialist.¹⁸ If aphasia presents a problem in the informed consent process, postponement of surgery and anesthesia may be necessary to obtain the necessary help in communication.

MANAGING THE INCOMPETENT PATIENT

Research indicates that patients are more likely to be referred for competency evaluation if they refuse treatment, rather than for obvious signs of incompetence.⁶ This tendency reflects physicians' biases rooted in the principle of beneficence and saving lives. Refusal per se should not automatically trigger a psychiatric consultation; only the lack of decision-making capacity is an indication for such referral. Agreement to treatment by an incompetent patient is equally problematic. Even if a patient consents to treatment, if decision-making capacity is in question, consideration should be given to obtaining a competency evaluation and possibly seeking an appropriate surrogate decision-maker.

If the patient is deemed incompetent and incompetence is likely to persist, the physician might have to rely on a surrogate decision-maker. Proxy consent for incapable individuals is thought to promote autonomy.¹⁹ Some patients, incapable of deciding about medical treatment, may still retain capacity to appoint a proxy agent, and in this case their choice should be respected.²⁰ Mechanisms for surrogate decision-making include advance directives, legal guardians, and family members in a strict hierarchy that varies considerably from state to state. The anesthesiologist needs to be aware of state and local regulations regarding who is a legitimate surrogate for specific purposes.

If the patient is clearly incompetent (ie, unconscious or delirious) and needs emergency care, the state law may permit a life-saving treatment in the absence of consent. The care should be directed at goals that, in the opinion of the physician, are in the patient's best interest. The physician should not use this circumstance to circumvent a valid, written advance directive. This emergency exception to informed consent is based on the "reasonable man" standard, in which the law assumes that if the patient were competent, he or she would accept a life-saving treatment, because it is in his or

her best interests.²¹ What constitutes an emergency, however, varies in different states, and the type of documentation needed to support such a decision will probably be clearly defined in hospital policies and procedures. An “emergency” does not give a physician permission to ignore a competent patient’s decisions, or, in the case of an incapacitated patient, previously expressed health care directives. An emergency exception applies only when the patient’s desires are unknown and have not previously been expressed, and time will not permit the location of an appropriate surrogate decision-maker.

Legally and ethically, this emergency exception does not apply to the patient who has refused treatment when conscious and clearly competent, but has lost consciousness or the ability to communicate later. If that were true, then all physicians would have to do would be to wait for a patient to lose consciousness, and then do whatever they think is best, a course of action that completely usurps autonomy. The rights of unconscious patients to have their previously expressed choices followed have been confirmed in many court cases, including the cases of Karen Ann Quinlan,²² Nancy Cruzan,²³ and most recently, Terri Schiavo.²⁴ Each of these women had become permanently unconscious and dependent on medical care consisting of mechanical ventilation (Quinlan) and artificial nutrition (Cruzan and Schiavo). Family members sued to have medical interventions stopped in accordance with each patient’s previously expressed wishes. In all cases, court decisions confirmed the rights of these patients to refuse even life-saving therapy through surrogate decision-makers. In 1990, the Patient Self-Determination Act passed by the US Congress confirmed these rights and established the process of advance directives.²⁵ These cases also pointed to how different potentially legitimate surrogates may have very different perspectives on the patient’s wishes, making it important that the anesthesiologist understands and acts in accordance with the relevant policies and procedures.

Advance directives are statements regarding future medical decision-making created by a person while still competent and may be written or oral. Two types of written advanced directives include living wills and Durable Powers of Attorney for Health Care Decisions (DPOAs). Living wills allow caregivers to understand the patient’s wishes and philosophy, and address a limited number of specific decisions. However, it is impossible to foresee all future situations, and living wills may lack specific instructions for dealing with many complex situations. For that reason, a DPOA may be used. A DPOA authorizes a designated person to act as a health care proxy when the patient is not competent to decide. The circumstances under which a DPOA becomes effective may vary in different states.

In cases in which a patient has never been competent or has become incompetent without providing advance care directives, state law may designate a hierarchy of persons to make medical decisions for the patient. A common hierarchy is the patient’s spouse or domestic partner, followed by the patient’s children over 18 years old if all are in agreement, followed by the patient’s parents if both are in agreement, followed by the patient’s siblings if all are in agreement. A legal guardian may be appointed by court as a surrogate decision-maker when appropriate surrogates are not available, or if surrogates cannot agree. The law assumes that surrogate decision-makers will make medical decisions on behalf of the patient by the principle of substituted judgment. Substituted judgment means that the proxy presumably is familiar with the patient’s values and desires, has had discussions about possible future illness, knows what the patient would like, and will make the same decisions regarding health care that the patient would make for him- or herself.²⁶ The weakness of this approach is that in reality many family members do not discuss illness-related and end-of-life issues, and do not know what the patient would really want. Even

worse, some proxies may give consent even if they believe that the cognitively impaired patient would not do so if he or she were capable.²⁷ If the patient's desires are not known, and there is no proxy decision-maker available, then care should be instituted in the patient's best interests, based on what a "reasonable person" would decide.

Anesthesiologists should be aware that in some cases state law prevents anyone but a court from consenting for specific procedures. In the state of New York, for example, electroconvulsive therapy cannot be consented to by a surrogate decision-maker such as a spouse or parent, even if one is available. Such treatment requires a court order.²⁸ Laws vary from state to state.

Surrogate Consent for Research

Regulations regarding the protection of human research subjects are found primarily in federal regulations and guidelines (45 Code of Federal Regulations [CFR] 46, 21 CFR 50). These regulations specifically refer to a "legally authorized representative" but leave to state law how that is defined. The Secretary's Advisory Committee on Human Research Protections (an advisory body to the Secretary of Health and Human Services) has recently recommended that federal regulation address these definitions (<http://www.hhs.gov/ohrp/sachrp/mtgings/mtg03-09/mtg03-09.html>).

INFORMED REFUSAL AND DO NOT RESUSCITATE ORDERS

The principle of respect for patient autonomy is rendered nonsensical if informed patients are not allowed to refuse therapy, because this invalidates the essential voluntary aspect of consent. Decisions to forego or terminate life-saving therapy such as mechanical ventilation in the intensive care unit (ICU) have become commonplace. But what about refusals of life-saving therapy in the operating room? Geriatric patients facing critical procedures near the end of life may have important wishes regarding their medical care during anesthesia and surgery. They do not a priori surrender their rights at the operating room doors to have such decisions guide their care while under anesthesia.

Do not resuscitate (DNR) orders can present substantial difficulty to operating room personnel, who may feel that principles of nonmaleficence and beneficence are compromised if a cardiac arrest during surgery cannot be treated.²⁹⁻³¹ Surgical stress and bleeding, purposeful pharmacological respiratory depression, extensive use of fluids and vasoactive drugs all contribute to the perception of surgery with anesthesia as a process of ongoing resuscitation. Many argue that acute events that happen during surgery are often reversible, carry favorable prognosis, and should always be treated. Consequently, perioperative care providers are inclined to initiate resuscitation promptly and to do everything that is possible to save a patient's life. As many as 50% of anesthesiologists assume that DNR orders are automatically suspended during surgery.²⁹

The argument that anesthesia and surgery are a process of ongoing resuscitation is specious, because cardiopulmonary resuscitation (CPR) is something that anesthesiologists try to avoid in the operating room, rather than being a part of routine anesthesia care. Simply because some of the aspects of routine anesthesia care, such as mechanical ventilation, resemble some aspects of CPR does not make them the same, any more than one would describe a patient being ventilated in the ICU as undergoing ongoing resuscitation.

However, many of the concerns of operating room health care workers are justified. CPR does carry a somewhat more favorable prognosis in the operating room than in other hospital locations.³² This is likely because cardiac arrest in the operating room is

witnessed and due to specific and generally reversible causes, and treatment is therefore directed to a specific cause and initiated earlier in the arrest. But while these facts change the prognosis of the treatment, and are important to present to patients who have DNR orders, they do not alter the obligation of physicians to obtain consent from the patient to suspend a DNR order, or to respect the DNR order if the patient does not wish to suspend it for surgery.

CPR may prolong life, but for terminally ill elderly patients it may not necessarily represent “doing good” and can cause significant harm. Resuscitation may bring about prolongation of dying and suffering instead, such as prolonged stay in the ICU, long-term mechanical ventilation, tube feedings, multiple intravenous lines, and loss of control over end-of-life issues. Up to 44% of all survivors of in-hospital CPR have significant residual functional impairment,³³ and few patients fully recover to the previous state of health. The prognosis is even worse for older patients. While survival after CPR in the operating room is better than that in other hospital settings, significant numbers of patients will still suffer painful injuries, residual disabilities, and death.^{34–36}

Surgical patients have the right, based on law, to refuse any medical treatment, including life-sustaining treatment.³⁷ Surveys indicate that patients who are older and functionally impaired are more likely to decline CPR.³⁸ Many terminally ill elderly patients seek surgical palliation of their conditions. Requiring them to suspend their DNR orders and potentially undergo CPR to obtain the desired palliation is inhumane, and does not appropriately recognize their right to make health care decisions.

Many institutions have policies by which DNR orders are automatically, presumably temporarily, suspended when a patient enters the operating room. Most medical ethicists and medical professional organizations associated with surgical care of patients now agree that automatic suspension of DNR orders in the setting of anesthesia and surgery does not appropriately recognize the ethical principle of respecting patient autonomy. However, continuing DNR orders in the operating room without discussing the risks and benefits does not address patient rights to make informed decisions. Professional guidelines of the American Society of Anesthesiologists,³⁹ American College of Surgeons,⁴⁰ Association of Operating Room Nurses,⁴¹ and Joint Commission on Accreditation of Healthcare Organizations (JCAHO)⁴² all state that “Re-discussion of DNR orders and consent/refusal should be documented before the patient enters the operating room.”

Because the reasons for, and prognosis of, CPR in the operating room are different from those of other hospital locations, the anesthesiologist has an ethical obligation to provide patients and their surrogate decision-makers with DNR orders with the relevant information, and determine what their wishes would be under these altered circumstances. This discussion should include determining the patient’s goals for therapy, and which aspects of resuscitation from cardiac arrest would be acceptable. Therapies common to resuscitation that cannot be avoided because of the nature of the surgery should be carefully explained. It may be impossible, for example, to undertake thoracotomy if the patient utterly refuses intubation. Discussion of specific therapies is often necessary, but the goal of such discussions is to establish the patient’s general goals with regard to resuscitation, rather than providing an exhaustive “checklist” of therapies to the patient for approval or disapproval.

Now let us go back to the case described at the beginning of this article.

Do the consent forms attached to the chart of that patient represent valid consent to surgery and anesthesia?

The best way to verify the validity of the consent is to talk to the patient. Although he appears to be confused, his appearance may be the result of discomfort, pain, anxiety,

or hearing impairment, and not true confusion. After the anesthesiologist ensures that the patient is positioned in the bed comfortably with his hearing aids in, and has provided treatment for pain or anxiety if necessary, he or she should ask the patient in a clear voice, using simple vocabulary, whether he understands what is happening. The conversation may then help to reassure the health care team that the patient understands his current situation, and that he has indeed provided a valid consent for surgical procedure.

Even if, after these measures, the patient still appears confused, it does not necessarily mean that he was not competent when the consent was given. Witnesses to the signing of the patient's "X" may be able to state whether the patient understood what he was signing. If the signature on the consent form was not witnessed, then the consent might not be valid. If the surgery is not emergent, options include delaying surgery for a competency evaluation or until an appropriate surrogate decision-maker can be found. If the surgery is emergent, then the physicians should proceed with their best understanding of the patient's best interests, and the likely decisions a reasonable patient would make.

If the patient is deemed not competent to have consented for surgery, then he was also not competent to consent for a clinical research study. Depending on the research protocol and Institutional Review Board (IRB) approval, a surrogate decision-maker may be able to consent for the patient to be included in the study, but this should be verified and not assumed. In such cases, if a surrogate decision-maker cannot be found, the patient should not receive an experimental implant and should be removed from the study protocol.

SUMMARY

Informed consent in elderly patients presents many ethical and legal challenges. However, aging should not be viewed as a disease, and physicians should avoid biases with regard to aging patients and their wishes. The purpose of informed consent is to promote autonomy, to protect a patient from undesired treatment, and to help the patient to make appropriate medical care decisions that correlate with his or her personal values. Informed consent is a process of shared decision-making, not merely an act of obtaining a signature on a consent form. Most aging patients are competent to provide consent for medical care. Physicians should facilitate the consent process by clear communication and by relieving obstacles such as pain, undue anxiety, and language barriers. A surrogate decision-maker should be sought for an incompetent patient. If the care is emergent and no surrogate decision-maker is available, regulation may permit the physician to undertake treatment with appropriate documentation. Advance directives are legally and ethically binding tools by which patients can express their decisions regarding medical care before they lose capacity to do so. DNR orders should not be automatically suspended for anesthesia and surgery. Discussion of these orders is part of informed consent, and the patient's wishes regarding resuscitation in the operating room should be respected. Surrogate consent for participation in research is not necessarily allowed by IRB approval and research protocols. The acceptability of enrolling an incompetent patient in a research protocol via surrogate consent should be verified before doing so.

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