Cardiopulmonary resuscitation for patients in a persistent vegetative state: Futile or acceptable?

Charles Weijer, MD, PhD

Recent experiences relating to decisions about resuscitation have raised troubling questions for physicians caring for patients in a persistent vegetative state (PVS): Do families have the right to demand cardiopulmonary resuscitation (CPR) for such patients? Must physicians accede to these demands, or may family wishes be overridden on grounds of futility? A case description is presented here to illustrate the situation; this case reflects the author's experience and does not refer to any particular patient.

A 65-year-old retired corporate vice-president who was an Orthodox Jew became ill with pneumonia; he needed mechanical ventilation and was admitted to the intensive care unit (ICU). His course in the ICU was complicated by adult respiratory distress syndrome, prolonged ventilation requiring tracheostomy and subsequent chronic pulmonary insufficiency. During his stay in the ICU, cardiopulmonary arrest occurred. Although resuscitation efforts were successful, the patient suffered severe anoxic encephalopathy secondary to the cardiac arrest and remained in a PVS. Three months after the cardiac arrest the neurologist concluded that the patient's chances for meaningful recovery were remote. When the family was approached about a do-not-resuscitate (DNR) order, they refused, citing a religious obligation to preserve life, even unconscious life. After extensive discussions within the health care team, the hospital bioethicist was consulted. The bioethicist, following the hospital's DNR policy (which was based on the "Joint Statement on Resuscitative Interventions (Update 1995)"1) concluded that CPR would be futile in this case and recommended that a DNR order be written against the family's wishes. The family notified the hospital of their intention to seek a court injunction.

PVS is a state of eyes-open unconsciousness with sleep—wake cycles in which the patients are incapable of awareness of themselves or their environment.^{2,3} PVS may result from traumatic or nontraumatic (anoxia, stroke, degenerative or metabolic disease) injuries. Recovery of consciousness, particularly recovery with good function, is highly unlikely after 3 months in a PVS associated with a nontraumatic cause or after 12 months for cases involving trauma. Because the functions regulated by the hypothalamus and brain stem (spontaneous respiration, cardiovascular control and the gag reflex) are often preserved, the life expectancy of patients in a PVS is substantial, 2 to 5 years on average.

The cases of Karen Quinlan⁴ and Nancy Cruzan⁵ brought the issue of termination of life-prolonging treatment in PVS, including artificial hydration and feeding, to the fore. In both cases, the families were (eventually) permitted to refuse life-sustaining treatment on the grounds of the right of the patient (or his or her surrogate) to informed consent to, and hence informed refusal of, medical treatment. A variety of subsequent position papers also recognize the right of family members to refuse life-prolonging treatment in such cases.⁶ Thus, referring to the case at hand, the patient's family would have been within its rights to refuse CPR, particularly if the patient had expressed a prior wish not to receive such treatment.

But the family in this case decided otherwise. Can physicians withhold CPR against family wishes in cases of PVS? The answer is "yes" according to the "Joint



Editorial

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Dr. Weijer is Bioethicist, Mount Sinai Hospital and University of Toronto Joint Centre for Bioethics; Assistant Professor of Medicine, University of Toronto; and Associate Member, Samuel Lunenfeld Research Institute, Toronto, Ont.

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Statement on Resuscitative Interventions (Update 1995)," a position paper of the Canadian Medical Association, the Canadian Nurses Association and others. The joint statement is based upon a number of "guiding principles": open communication, informed decision-making, the competent patient's right to refuse treatment, respect for prior expressed wishes and the values of incompetent patients. The joint statement further notes that "[t]here is no obligation to offer a person futile or nonbeneficial treatment."

In the joint statement, treatment is considered "futile" or "nonbeneficial" if "it offers no reasonable hope of recovery or improvement or because the person is permanently unable to experience any benefit" [emphasis added].1 The latter of the 2 categories of "futility" seems designed to include patients in a PVS. In the schema of treatment decisions presented, such patients are categorized as "people who almost certainly will not benefit." The joint statement says that "[p]eople who almost certainly will not benefit from CPR are not candidates for CPR, and it should not be presented as a treatment option." Furthermore, "[p]eople . . . who almost certainly will not benefit from it [CPR] should not be given this treatment if an arrest occurs." I believe that this aspect of the joint statement is neither ethically nor legally defensible and hence that hospitals ought not to rely upon this aspect in their own policy statements.

Ethical medical care is based on a number of principles: respect for persons, beneficence and justice. Although many people would not wish life-prolonging treatment in the unquestionably diminished condition of PVS, the family in this case had a deeply rooted belief in the sanctity of life, a belief in the God-given sacredness of human life. This is a view shared by members of a variety of religions, including Orthodox Judaism, fundamentalist Protestants and conservative Catholics. In the Orthodox Jewish faith, there is a religious obligation to seek out and accept life-prolonging treatment. Accordingly, when faced with the choice of requesting or refusing CPR, the family of the patient in this case demanded that it be provided. The principle of respect for persons requires that physicians take such beliefs and choices seriously.

The joint statement fails because it does not allow physicians to respect choices for life-preserving therapy that are rooted in religious belief. A colleague and I have argued elsewhere⁷ that the concept of medical futility⁸ is untenable, in part because it constitutes a portmanteau manoeuvre. Futility bundles uncontroversial cases involving treatment that cannot work with cases involving effective treatment that supports controversial ends, e.g., preserving permanent unconsciousness. In doing so, the concept of futility is an attempt to redefine a debate about conflicting values as a debate about medical probabilities.

And given that physicians are generally the sole arbiters of medical probability, this amounts to saying to families, "Your values don't count."

The joint statement's provision that no CPR should be provided when a patient is "permanently unable to experience any benefit" contains a smuggled premise, namely, that a life of permanent unconsciousness is not worth preserving. The family involved in this case disagreed with precisely this point.

The principle of respect for persons is tempered by the principle of beneficence (do no harm; maximize possible benefits and minimize potential harms). On this basis, familial demands for treatment may be overridden if they will result in extreme suffering or indignity. However, suffering is not an issue in PVS. Patients in a PVS are incapable of conscious experience and therefore cannot suffer. The results of neuropathologic examinations and positron-emission tomographic studies provide empirical backing for this conclusion.

Even though patients in a PVS lack the capacity for suffering, they must be treated with dignity. Is the provision of CPR to a patient in a PVS an indignity? Dignity is sensitive to the particulars of the situation. For example, kneeling is an indignity if I require it of my research assistant in my presence; it is not an indignity if it is required as a part of his religious observances. Similarly, CPR in cases of PVS may indeed be an indignity to those who do not believe in the sanctity of life. Yet it may not be an indignity to those who in receiving treatment are fulfilling an obligation to their God. Thus, a valid evaluation of dignity must be sensitive to the cultural and religious context of the patient, and physicians must be careful not to project their own culturally biased assessments on patients of different backgrounds.

Thus, an ethical analysis supports a family's right to choose CPR in cases of PVS. It may be that the courts would side with the family in their demand for life-prolonging treatment. Daar, in a recent US legal review of the issue, concluded:

To date, in nearly every known case in which the patient has sought treatment and the doctor has objected on the grounds that the treatment offers no medical benefit, courts have found in favour of the patient.

Interestingly enough, the 2 best-known legal cases involving patients in a PVS also involve family demands for life-prolonging treatment based on religious beliefs. Helga Wanglie was an 86-year-old woman who was left in a PVS and dependent on a ventilator after cardiac arrest. Oliting his wife's pro-life beliefs, Helga Wanglie's husband refused to consent to the withdrawal of life support for his wife. In the other case, Baby K was born with anencephaly and was discharged to a nursing home 1 month after birth. Be was repeatedly brought back to



the hospital with breathing difficulties necessitating mechanical ventilation, treatment that her physicians were reluctant to provide. The mother cited her own Catholic faith as the basis for her demand that life-supporting measures be provided.¹³ In both cases, the courts upheld the family's right to demand life-prolonging treatment.

While these US legal cases indicate that demands for life-prolonging treatment made on religious grounds ought to be respected, a recent Canadian case makes clear that the family may not legitimately demand CPR on behalf of a patient in a PVS for any reason whatsoever. The case was heard by the Court of Appeal of Manitoba (in November 1997) and involved a 1-year-old child who, at the age of 3 months, had been savagely attacked and remained in a PVS. After the attack, the child had been taken by Child and Family Services of Central Manitoba. Upon the advice of the child's physicians, permission was sought from the court for a DNR order. A lower court granted the order, and the parents of the child appealed the decision. Justice J.A. Twaddle, upholding the decision of the lower court, commented:14

[I]t is in no one's interest to artificially maintain the life of a . . . patient who is in an irreversible vegetative state. That is unless those responsible for the patient being in that state have an interest in prolonging life to avoid criminal responsibility for the death.

The demand based on deeply held religious or cultural beliefs for CPR for a patient in a PVS remains untested in Canadian courts. Picard and Robertson, in their authoritative text on Canadian health law, caution health care workers against "the potential dangers and problems underlying the concept of medical futility, particularly if it is interpreted broadly and used to justify the withholding of treatment for socio-economic and value-laden reasons."¹⁵

It is certainly not my contention that health care providers must always accede to the demands of patients and their families. Physicians have no obligation to offer or provide treatments that fall outside the bounds of standard medical practice.16 The standard of care for the provision of CPR is evolving. It is now clear from a number of empirical studies that survival after cardiac arrest in a variety of circumstances, including trauma and sepsis, is highly improbable.17-19 It may be that CPR need be neither offered nor provided in such cases. In addition, it should be noted that the provision of ICU care is an issue separable from the provision of CPR. One might, for a variety of reasons, decide that CPR is appropriate in a given case and that admission to the ICU is not. In such cases, "full code" status should be retained and a do-not-intubate order written.

But there is no evidence that CPR is ineffective for patients in a PVS. Thus, the question of whether to provide CPR in the context of PVS is not one of probabilities; it is

a matter of what kind of life is worth preserving. The joint statement's attempt to capture such cases under the rubric of futility wrongly overrides the wishes and values of patients and their surrogates. Physicians ought to be aware of the fact that courts may side with families in their demands for life-prolonging therapy in cases of PVS. The joint statement, and hospital policies based on it, ought to be amended accordingly.

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Reprint requests to: Dr. Charles Weijer, Mount Sinai Hospital, Executive Offices, 600 University Ave., Toronto ON M5G 1X5; fax 416 586-8869; cweijer@mtsinai.on.ca