SPECIAL ARTICLE

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Pain, Euthanasia, and Anesthesiologists

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ALMOST two-thirds of Americans favor legislation that would legalize euthanasia. Recently, voters in California and Washington State narrowly defeated initiatives to enact such legislation, but similar measures are being considered in at least 20 more states across the country. Individuals report that fear of pain is one of the most important reasons they support euthanasia legislation. Even though this fear of pain is "one of the most pervasive causes of anxiety among patients, families and the public," studies show that physicians generally are not well informed about proper approaches and techniques for controlling pain in the terminally ill.

Why should anesthesiologists be concerned about these issues? First, legislation legalizing euthanasia is likely to be enacted in at least some states. Anesthesiologists will then occupy a central role as consultants and possibly as practitioners of euthanasia. A leading spokesman of the euthanasia movement in The Netherlands, Dr. Pieter Admiraal, an anesthesiologist, has advocated a euthanasia technique employing short-acting barbiturates and muscle relaxants. Since anesthesiologists have more experience with these agents than any other medical specialists, undoubtedly they will be called upon for consultation and advice. Involve-

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ment of anesthesiologists may go even further, however. A recent editorial claimed that euthanasia clinics should be established, and that they should be staffed by anesthesiologists who would have responsibility for administering the lethal drugs.⁵

Second, fear of uncontrolled pain is clearly one of the major forces driving the public's desire for legalized euthanasia. Both public opinion surveys and federal advisory agencies have emphasized that pain control must become a higher priority on the medical agenda. There is evidence that more effective approaches to pain and suffering may decrease requests for euthanasia and assisted suicide. Anesthesiologists therefore have a great opportunity (and perhaps responsibility) to address some of the key issues of the euthanasia debate. Anesthesiologists should be aware of the meaning of the terms used in the debate, historical and ethical aspects of the euthanasia movement, and the role of pain management in the care of the terminally ill.

Definitional Terms

As defined by the American Medical Association's Council on Ethical and Judicial Affairs, *euthanasia* is the medical administration of a lethal agent to a patient for the purpose of relieving the patient's intolerable and incurable suffering. *Voluntary euthanasia* is euthanasia that is provided to a competent person in response to his or her informed request. *Nonvoluntary euthanasia* is the provision of euthanasia to an incompetent person according to a surrogate's decision. *Involuntary euthanasia* is euthanasia performed without a competent person's consent. Involuntary euthanasia has no ethical merit and will not receive further discussion. The concern that voluntary euthanasia ultimately may lead to involuntary euthanasia is discussed below.

Another popular distinction is that between *active* and *passive* euthanasia. Passive euthanasia commonly is construed as the withdrawal of life-sustaining treatment, whereas active euthanasia implies an intervention that hastens death. While many bioethicists have cast doubt on the moral relevance of this distinction,⁹

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we do not intend our remarks to apply to the withdrawal of treatments, but rather only to the administration of lethal agents with the intention of causing the patient's death.

Euthanasia and assisted suicide differ in the degree of physician involvement. A paradigm of assisted suicide is a physician providing a prescription for a lethal dose of barbiturates to a patient in response to the patient's request and with the knowledge that the medication will be used to commit suicide. A paradigm of euthanasia is a physician administering a lethal dose of barbiturates directly. Some believe there is a morally relevant difference between euthanasia and assisted suicide.8,10 They point out that with assisted suicide "the final act is solely the patient's, and that the risk of subtle coercion from doctors, family members, institutions, or other social forces is greatly reduced."10 Others argue that the distinction between the two is illusory.11 In both cases, they claim, the decision rests with the patient, and the choice can be revoked up until the last moment. Furthermore, with both euthanasia and assisted suicide, the cooperative involvement of the physician is necessary. Without resolving this debate, most of the claims made in the remainder of this paper may be considered relevant to assisted suicide as well as euthanasia.

Euthanasia: A Brief History

While suicide often was seen as both exemplary and noble in the ancient Greco-Roman world, physicians have always been reluctant to participate. When the emperor Hadrian wished to commit suicide, for example, his physician chose to commit suicide himself rather than comply with his emperor's request for assistance. More recently, when Napoleon asked his personal physician to provide lethal drugs to several mortally ill soldiers who were unable to march and who were likely to be captured, the doctor refused. He declared that his obligation was to cure people, not to kill them. 13

Any discussion of the modern history of euthanasia immediately recalls the atrocities of the Nazi doctors. ¹⁴ This analogy must be taken seriously, particularly since physicians were enthusiastic participants in carrying out those policies. As in the current debate, the groups initially affected by the Nazi euthanasia movement were the incurably ill, and some of the early Nazi proposals even included informed consent. Despite these chilling reminders, the modern euthanasia movement is suffi-

ciently distinct from the Nazi experience to warrant unbiased appraisal. In particular, current proponents of euthanasia base their beliefs squarely upon the principle of autonomy and the right of individuals to determine for themselves what is in their best interest.

By far the most experience with physician involvement in euthanasia has occurred in Holland.¹⁵ The first euthanasia case to reach the courts in The Netherlands occurred in 1973 and involved a physician who performed voluntary euthanasia on her terminally ill mother. Although the court found her guilty, she was given a suspended sentence, tacitly excusing the act.¹⁶ Following additional court cases, in 1985, The Netherlands' State Commission on Euthanasia endorsed guidelines for physicians concerning the practice of euthanasia. They require⁴:

- 1. *Voluntariness:* The patient's request must be persistent, conscious, and freely made;
- 2. Unconditional suffering: The patient's suffering, including but not limited to physical pain, cannot be relieved by any other means; both physician and patient must consider the patient's condition to be beyond recovery or amelioration; and
- 3. Consultation: The attending physician must consult with a colleague regarding the patient's condition and the genuineness and appropriateness of the request for euthanasia.

Although euthanasia remains illegal in Holland (punishable by up to 12 yr in prison), no physician who has followed the guidelines has been prosecuted since the endorsement of these guidelines. ¹⁶

How often is euthanasia performed in Holland? A recent study reports that euthanasia accounts for about 2,300 deaths per year, or about 2% of all deaths in Holland. The Since every year some 9,000 patients ask for euthanasia, physicians apparently are granting only a minority of the requests. In 63% of cases involving euthanasia, the life expectancy of the patient at the time of death is less than 2 weeks; in 10% it is greater than 3 months.

In the United States, the Hemlock Society has been the most influential organization in keeping the euthanasia agenda before the American Public. Derek Humphry, the founder of the Hemlock Society, initiated the movement after assisting the suicide of his terminally ill wife. *Final Exit*, ¹⁸ his practical suicide manual for the terminally ill, was recently on the *New York Times* best seller list. His organization has spearheaded the efforts to legalize euthanasia in several states.

"It's Over, Debbie," an account in JAMA of the administration of an apparently lethal injection of morphine by a medical resident to a woman dying of cancer, marked the beginning of intensive debate within the medical profession over euthanasia and assisted suicide. 19 This was followed by the activities of Dr. Jack Kevorkian, a retired pathologist who at the time of this writing has assisted in the suicides of five women, several of whom were not terminally ill.‡ The medical community has responded to both the "Debbie" article and Kevorkian with overwhelming criticism.20 In contrast, when Dr. Timothy Quill published his account of assisting the suicide of one of his terminally ill patients, most commentators rallied to his defense.²¹ The most striking difference between Quill and Kevorkian was the fact that Quill was acting out of a longstanding relationship with his patient and had gone to great lengths to explore all alternative options before becoming complicit in her suicide, whereas Kevorkian apparently often knew his patients for only a few hours before assisting with their demise.

In November 1991, voters in Washington State rejected by 54% to 46% an initiative that would have made their state the first jurisdiction in the world to legalize voluntary euthanasia.22 One year later, in November 1992, a similar initiative was defeated in California by an identical margin.§ Like the Washington State initiative, the California bill would have allowed competent, terminally ill patients to request "aid-indying to end their life in a painless, humane, and dignified manner." Terminally ill was defined as having an incurable or irreversible condition that two physicians claim will lead to death within 6 months. Physicians who provided this assistance would have been immune from legal liability. Physicians morally opposed to euthanasia would nevertheless have been obliged to transfer the patient's care to another physician, and public facilities would not have been able to refuse to perform euthanasia. "#

Unlike the Washington State initiative, the California proposal seemed to fail on a number of technical inadequacies in the legislation, rather than on the more emotional issue of euthanasia *per se.* Particularly troublesome to many was the lack of protection against misdiagnosis and the absence of mandatory waiting periods, psychiatric evaluations, and family notification. The reporting requirements also were severely criticized as being misleading; physicians who administered euthanasia were instructed not to cite the lethal injection as the cause of death on the death certificate, but rather to list the underlying disease as the cause of death.

Euthanasia advocates already are attempting to correct the inadequacies of the Washington State and California initiatives. Efforts are underway to get similar measures on the ballots in Oregon and again in Washington. On a related tack, Quill and colleagues recently published a series of guidelines for a policy legalizing assisted suicide but not euthanasia. ¹⁰ Michigan and New Hampshire already are considering legislation of this kind. || # Even opponents of euthanasia concede that euthanasia or assisted suicide is likely to become legal in at least some jurisdictions within the near future.

Ethical Aspects

Any discussion of the ethical aspects of euthanasia must distinguish between individual acts of euthanasia and a public policy legalizing euthanasia. The existence of a justified act does not necessarily justify a policy condoning such an act, and an act that is an exception to a policy does not necessarily invalidate the policy.

If constructed with all the right details, a very persuasive argument can be made for some individual acts of euthanasia. In the case of a competent patient with untreatable and unbearable suffering, fundamental beliefs about autonomy and the right to self-determination incline many physicians to be sympathetic to the patient's request. Nevertheless, even if it is conceded that patients have a right to request euthanasia, this does not imply a correlative duty on a physician to comply with the request. Physicians should not be forced to engage in practices to which they are morally opposed. If the physician sees euthanasia as a morally acceptable alternative, however, then there must be other reasons for arguing that he or she should not comply. Some claim that physicians should never participate in euthanasia because to do so would violate the most basic

[‡] Associated Press: Kevorkian said to be present at 5th suicide. New York Times, September 27, 1992, p A28.

[§] Gianelli DM: Euthanasia measure fails, but backers vow renewed push. American Medical News, November 23, 1992, p 30.

^{||} Gianelli DM: California initiative would legalize doctor assisted euthanasia. American Medical News, November 2, 1992, pp 1, 39, 40.

[#] Gianelli DM: Analysis of initiative highlights concerns about physician liability. American Medical News, November 2, 1992, p 40.

values of the profession. This objection is addressed below.

The most serious objections to euthanasia revolve around whether it should be legitimized and legalized by public policy or legislation. Numerous arguments have been advanced claiming that the direct and indirect effects of legalized euthanasia would be extremely detrimental.

First, euthanasia opponents claim that legalized euthanasia would erode the public's trust and confidence in the medical profession. In an article titled "Doctors Must not Kill," four prominent medical ethicists assert, "If physicians become killers or are even licensed to kill, the profession—and, therewith, each physician—will never again be worthy of trust and respect as healer and comforter and protector of life in all its frailty."²³ This claim is buttressed by the fact that approximately two-thirds of nursing home residents in Holland are afraid that their doctors may one day kill them. On the other hand, public opinion polls in the United States clearly indicate that most of American society would like its physicians to assume this role.¹

Second, some worry that euthanasia legislation would decrease our motivation to care for the terminally ill. Rather than struggle with innovative and challenging approaches for managing severe pain and suffering, they fear we would opt for the easy alternative of euthanasia. Euthanasia supporters respond by pointing out that the increasing acceptance of withdrawal of life support does not seem to have had this effect. In addition, the relatively small number of patients who probably would receive euthanasia (2% of all deaths in Holland¹⁷) is unlikely to have a significant impact on our attitudes toward the terminally ill.

Third, many are concerned that euthanasia would be seen as an acceptable approach for reducing the high costs of medical care. In particular, individuals may request euthanasia out of concern for being an excessive financial burden on their families. In a recent poll, Americans cited this concern as the most important reason for favoring euthanasia legislation. This is not as much of an issue in Holland, where all medical care is funded by the government. In the United States, however, such a concern must be taken seriously.

Fourth, any euthanasia legislation will face significant definitional problems. While the modern euthanasia movement is founded on the belief that individuals should have as much control over their destiny as possible, few are willing to allow patients who are neither terminally ill nor in unbearable suffering to receive

euthanasia. Respect for autonomy is therefore limited by certain pragmatic concerns. The initiatives proposed in both Washington State and California require a patient to be terminally ill, defined as having less than 6 months to live in the opinion of two physicians. Any physician knows the extraordinary difficulties encountered in attempting to prognosticate about terminal diseases. Clearly, many physicians would rightfully refuse to certify patients as terminal within 6 months, given the lack of objective criteria for making such a determination. Another problem with the requirement for "terminal illness" is whether patients must exhaust all treatment options before being acknowledged as terminal. Could a diabetic refuse insulin injections, for example, and then claim eligibility for euthanasia on the basis of being terminal? In a parallel vein, psychiatrists have pointed out the difficulties of ruling out affective psychopathology among those requesting euthanasia.²⁴ Similar problems would be encountered with a standard that required unbearable pain and suffering, given the difficulties inherent in quantifying these subjective phenomena. The Dutch explicitly state that mental suffering may be unbearable even when the patient has no physical disorder but suffers solely from psychosocial discomfort. This broad definition of suffering would make regulation by legislation even more difficult and unrealistic.

Fifth, some are concerned that euthanasia legislation would herald the re-entry of the judicial system into bedside decision-making, reversing the trend to make end-of-life decisions a matter for the patient, the family, and the medical caregivers. The greater judicial scrutiny required by legalized euthanasia could result in more judicial involvement in *all* decisions concerning lifesustaining treatments, something that many patient advocates and physicians would see as unnecessary and nonproductive.

Sixth, and perhaps most importantly, the legalization of voluntary euthanasia almost certainly would lead to the adoption of nonvoluntary euthanasia. American courts have held consistently that competent individuals retain their right to determine their medical care even after they become incompetent, through the choices of surrogate decision-makers. Extending this choice to surrogates would be a move from voluntary euthanasia to nonvoluntary euthanasia. Since nonvoluntary euthanasia is undoubtedly more open to abuse than voluntary euthanasia, and since most legal commentators believe that the former almost certainly will follow legalization of the latter, some claim we should

accept legalized euthanasia only if we are prepared to endorse euthanasia for many who have not explicitly requested it.

The Dutch cuthanasia guidelines emphatically require voluntary consent, yet it is instructive to see how practices in Holland have strayed from this ideal. In a recent survey of euthanasia practices in Holland, in addition to the 2,300 cases that ostensibly followed the guidelines, at least 1,000 additional cases were identified as involving nonvoluntary euthanasia. 17,25 In addition, at least three of eight neonatal centers surveyed by the Dutch Pediatric Society permitted the killing of handicapped newborns immediately after birth, clearly not in accordance with the guidelines.4 Finally, it is common practice to administer lethal drugs to patients who do not immediately die after "useless" treatment is withdrawn, even if the patient never requests euthanasia. Incredibly, the Dutch do not classify this practice as euthanasia, since it does not comply with the guidelines' requirement for voluntariness. The Dutch experience therefore strongly supports the conclusion that fears of slipping from voluntary to nonvoluntary euthanasia are a cause for concern.26

Pain and Suffering in Terminal Illness: Are Patients' Fears Justified?

Albert Schweitzer was perhaps one of the first to emphasize the role of physicians in treating pain. In 1931 he wrote: "We all must die. But that I can save him from days of torture that is what I feel is my great and ever new privilege. Pain is a more terrible lord of mankind than even death itself."27 Since fear of unrelieved pain persists as a major concern for both physicians and the public, it is worth reviewing the evidence that pain relief can be offered as a realistic expectation for patients with terminal illness. In the setting of widespread cancer, although more than half of patients will experience severe pain, their pain is manageable by oral administration of opioids alone in 70-80% of cases. 28-35 World-wide, the greatest barriers to effective management of pain in cancer are related to both an inordinate fear of opioids and political and economic barriers.¶ Side effects are encountered often, but proactive management is effective for nausea, pruritus, and constipation in the majority of cases.^{34,35} Some patients with cancer can be made comfortable only at the price of excessive sedation. For many of these patients, morning and midday administration of amphetamines has been shown to ameliorate the sedation while improving the analgesia.³⁶ Many patients with neuropathic pain find benefit from tricyclic antidepressants, anticonvulsants, and other classes of medications.^{37,38} Among patients unable to tolerate oral opioids, most can be made comfortable with intravenous or subcutaneous³⁹ infusions of opioids, along with a bolus or patient-controlled analgesia option for break-through pain.

With optimal use of systemic analgesics and adjuvants, there remains a small percentage of patients for whom there is no margin between inadequate relief and intolerable side effects. Depending on inclusion criteria used, this subgroup may comprise 1-6% of patients with terminal malignancy. This subgroup of patients are most likely to be referred to anesthesiologists, particularly those specializing in pain management. For many of these patients, good relief with tolerable side effects can be provided by invasive methods of analgesia including epidural and subarachnoid administration of opioids and local anesthetics, 40-43 neurolytic blockade, 44,45 and neurosurgical procedures including anterolateral cordotomy. 46 Since invasive methods of pain relief may be regarded by patients as yet another unpleasant procedure, it is essential that these procedures be undertaken with great attention to patient comfort and preservation of patient dignity. With the advent of ultra-short-acting intravenous anxiolytics and opioids, there is no justification for causing severe discomfort during performance of nerve-blocking procedures. Anesthesiologists' methods of pain management can play an important role in giving these patients viable alternatives to euthanasia or assisted suicide. With optimal application of all of these methods, the percentage of patients with unrelieved suffering appears extremely small, particularly if a moderate degree of sedation is regarded as tolerable.

Is Non-nociceptive Suffering Treatable?

There is growing awareness that palliative care and supportive care programs for patients with cancer, acquired immunodeficiency syndrome, and other devastating illnesses require management of forms of suffering unrelated to nociception *per se*. 31,33,47 Air hun-

[¶] World Health Organization: Cancer Pain Relief Program. Geneva, WHO, 1986.

ger, dyspnea, nausea, and related symptoms are major concerns for oncology patients, for which effective treatments exist in most circumstances. Air hunger and dyspnea are manageable with opioids, alone or in conjunction with anxiolytics, in virtually all patients.⁴⁷ Barbiturates also may have a role in managing some of these symptoms.⁴⁸

Depression, grief, and fears of isolation and abandonment contribute greatly to the suffering of patients with terminal illness. In one series of terminally ill cancer patients, 22 of 90 openly discussed the option of suicide, and an additional 4 patients requested euthanasia.³¹ Supportive care programs that address these concerns report that much of their patients' non-nociceptive suffering can be ameliorated, and that the majority of patients continue living until their final days with improved quality of life.^{31,33,49} Nevertheless, two of the patients in the series cited above followed through with their intention to commit suicide, despite apparently appropriate treatment.³¹

Should Physicians Participate in Euthanasia?

If euthanasia becomes legal, who should do it? Some have argued passionately that euthanasia is not a job for physicians⁵⁰; yet from a practical point-of-view, several considerations argue persuasively in favor of physician involvement. First, physicians are most qualified to provide patients with the best information regarding their prognosis, assuring that they are not suffering from a treatable psychiatric condition such as depression, and assuring that all alternative options have been tried and exhausted. Second, physicians have access to and knowledge of the most effective medications for administering euthanasia. Physicians are also less likely to err in the administration of the medications, assuring that the patient neither survives nor undergoes additional suffering as a result of the procedure. Third, surveys show that Americans are reluctant to ask family or friends to assist them in suicide, and some will be unable to take oral medication and will require intravenous administration. Fourth, society will reasonably want to limit the number of individuals who are sanctioned to perform euthanasia so that they can be held accountable for the exercise of this practice. While it is conceivable that the state could license a separate group of "euthanizers," in the absence of other overriding considerations, physicians (and anesthesiologists in particular⁵) are the obvious choice for the role.

These practical considerations aside, many insist that euthanasia is fundamentally inconsistent with the ethic of medicine.50 The anthropologist Margaret Mead believed that the greatest contribution of the Hippocratic Oath was its separation of the role of healer (white magic) from that of killer (black magic), and that the euthanasia movement threatened to blur this essential distinction.51 Prominent bioethicists also have insisted that doctors must not kill. "We call on fellow physicians to say that they will not deliberately kill. We must also say to each of our fellow physicians that we will not tolerate killing of patients and that we shall take disciplinary action against doctors who kill."23 Others disagree, however, upon equally fundamental principles. "To say that what defines the core of medical morality is that, first and foremost, doctors must never kill, and then to add as an afterthought that of course doctors must find ways to soothe and comfort the dying without killing them,...places devotion to abstract principle ahead of real care of the patient."52 In short, the question of whether killing can ever be healing raises an issue that probes to the very core of the morality of the profession.

Regardless of how the various arguments of the euthanasia debate are weighed, several points cannot be overlooked. The two most common reasons Americans advance for supporting euthanasia legislation are the desire not to be a burden on others and the fear of dying a painful death. While the financial drain of a prolonged terminal illness is only one type of burden, we cannot accept the possibility of individuals choosing to die merely because they cannot afford to live. The desire for legalized euthanasia is driven to at least some extent by our flawed health care system, and we must seriously consider the financial pressure to die before we can accept euthanasia as a satisfactory alternative.

The second most common reason for desiring legalized euthanasia, fear of a painful death, should be of special concern to anesthesiologists. The public has identified fear of pain as a source of great anxiety, and anesthesiologists as professionals should view their role in the management of pain as both an opportunity and a responsibility to contribute a service of great value. If we do our job well, we can hope to achieve the vision of the ethicist Howard Brody: "The ideal state of medical practice," he wrote, "would be when active

euthanasia is shunned by all physicians because to perform it would be to admit gross clinical incompetence, there existing so many better treatments for dying patients of all types and under all circumstances.¹⁵²

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