



CERTAIN ASPECTS OF THE CARE AND MANAGEMENT OF THE PERSISTENT VEGETATIVE STATE PATIENT

Report of the Ethics and Humanities Subcommittee

- I. The persistent vegetative state is a form of eyes-open permanent unconsciousness in which the patient has periods of wakefulness and physiologic sleep/wake cycles, but at no time is the patient aware of himself or his environment. Neurologically, being awake, but unaware is the result of a functioning brainstem, and the total loss of cerebral cortical functioning.
- A. No voluntary action or behavior of any kind is present. Primitive reflexes and vegetative functions which may be present are either controlled by the brain stem or are so elemental that they require no brain regulation at all.

Although the PVS patient generally is able to breathe spontaneously because of the intact brainstem, the capacity to chew and swallow in a normal manner is lost because these functions are voluntary, requiring intact cerebral hemispheres.

- B. The primary basis for the diagnosis of PVS is the careful and extended clinical observation of the patient, supported by laboratory studies. PVS patients will show no behavioral response whatsoever over an extended period of time. The diagnosis of permanent unconsciousness can usually be made with a high degree of medical certainty in cases of hypoxic-ischemic encephalopathy after a period of one to three months.
- C. Patients in a persistent vegetative state may continue to survive for a prolonged period of time ("prolonged survival"), as long as the artificial provision of nutrition and fluids is continued. These patients are not "terminally ill."
- D. Persistent vegetative state patients do not have the capacity to experience pain or suffering. Pain and suffering are attributes of consciousness requiring cerebral cortical functioning, and patients who are permanently and completely unconscious cannot experience these symptoms.

There are several independent bases for the neurological conclusion that PVS patients do not experience pain or suffering.

First, direct clinical experience with these patients demonstrates that there is no behavioral indication of any awareness of pain or suffering.

Second, in all PVS patients studied to date, post-mortem examination reveals overwhelming bilateral damage to the cerebral hemispheres to a degree incompatible with consciousness or the capacity to experience pain or suffering.

Third, recent data utilizing position emission tomography (PET) indicates that the metabolic rate for glucose in the cerebral cortex is greatly reduced in PVS patients, to a degree incompatible with consciousness.

- II. The artificial provision of nutrition and hydration is a form of medical treatment and may be discontinued in accordance with the principles and practices governing the withholding and withdrawal of other forms of medical treatment.
- A. The Academy recognizes that the decision to discontinue the artificial provision of fluid and nutrition may have special symbolic and emotional significance for the parties involved and for society. Nevertheless, the decision to discontinue this type of treatment should be made in the same manner as other medical treatment decisions, i.e. based on a careful evaluation of the patient's diagnosis and prognosis, the prospective benefits and burdens of the treatment, and the stated preferences of the patient and family.
 - B. The artificial provision of nutrition and hydration is analogous to other forms of life-sustaining treatment, such as the use of the respirator. When a patient is unconscious, both a respirator and an artificial feeding device serve to support or replace normal bodily functions which are compromised as a result of the patient's illness.
 - C. The administration of fluids and nutrition by medical means, such as a G-tube, is a medical procedure, rather than a nursing procedure, for several reasons.
 - 1. First, the choice of this method of providing fluid and nutrients requires a careful medical judgment as to the relative advantages and disadvantages of this treatment. Second, the use of a G-tube is only possible by the creation of a stoma in the abdominal wall, which is unquestionably a medical or surgical procedure. Third, once the G-tube is in place, it must be carefully monitored by physicians, or other health care personnel working under the direction of physicians, to insure that complications do not arise. Fourth, a physician's judgment is necessary to monitor the patient's tolerance of and response to the nutrients which are provided by means of the G-tube.
 - 2. The fact that the placement of nutrients into the tube is itself a relatively simple process, and that the feeding does not require sophisticated mechanical equipment, does not mean that the provision of fluids and nutrition in this manner is a nursing, rather than a medical, procedure. Indeed, many forms of medical treatment, including, for example, chemotherapy or insulin treatments, involve a simple self-administration of prescription drugs by the patient. Yet such treatments are clearly medical and their initiation and monitoring require careful medical attention.
 - D. In caring for hopelessly ill and dying patients, physicians must often assess the level of medical treatment appropriate to the specific circumstances of each case.
 - 1. The recognition of a patient's right to self-determination is central to the medical, ethical and legal principles relevant to medical treatment decisions.
 - 2. In conjunction with respecting a patient's right to self-determination, a physician must also attempt to promote the patient's well-being, either by relieving suffering or addressing or reversing a pathological process. Where medical treatment fails to promote a patient's well-being, there is no longer an ethical obligation to provide it.
 - 3. Treatments which provide no benefit to the patient or the family may be discontinued. Medical treatment which offers some hope for recovery should be distinguished from treatment which merely prolongs or suspends the dying process without providing any possible cure. Medical treatment, including the medical provision of artificial nutrition and hydration, provides no benefit to patients in a persistent vegetative state, once the diagnosis has been established to a high degree of medical certainty.

III. When a patient has been reliably diagnosed as being a persistent vegetative state, when it is clear that the patient would not want further medical treatment, and the family agrees with the patient, all further medical treatment, including the artificial provision of nutrition and hydration, may be forgone.

- A. The Academy believes that this standard is consistent with prevailing medical, ethical, and legal principles, and more specifically with the formal resolution passed on 15 March 1986 by the Council on Ethical and Judicial Affairs of the American Medical Association, entitled "Withholding or Withdrawing Life-Prolonging Medical Treatment."
- B. This position is consistent with the medical community's clear support for the principle that persistent vegetative state patients need not be sustained indefinitely by means of medical treatment.

While the moral and ethical views of health care providers deserve recognition, they are in general secondary to the patient's and family's continuing right to grant or to refuse consent for life-sustaining treatment.

- C. When the attending physician disagrees with the decision to withhold all further medical treatment, such as artificial nutrition and hydration, and feels that such a course of action is morally objectionable, the physician, under normal circumstances, should not be forced to act against his or her conscience or perceived understanding of prevailing medical standards.

In such situations, every attempt to reconcile differences should be made, including adequate communication among all principal parties and referral to an ethics committee where applicable.

If no consensus can be reached, and there appear to be irreconcilable differences, the health care provider has an obligation to bring to the attention of the family the fact that the patient may be transferred to the care of another physician in the same facility or to a different facility where treatment may be discontinued.

- D. The Academy encourages health care providers to establish internal consultative procedures, such as ethics committees or other means, to offer guidance in cases of apparent irreconcilable differences. In May 1985, the Academy formally endorsed the voluntary formation of multi-disciplinary institutional ethics committees to function as educational, policy-making, and advisory bodies to address ethical dilemmas arising within health care institutions.

IV. It is good medical practice to initiate the artificial provision of fluids and nutrition when the patient's prognosis is uncertain, and to allow for the termination of treatment at a later date when the patient's condition becomes hopeless.

- A. A certain amount of time is required before the diagnosis of PVS can be made with a high degree of medical certainty. It is not until the patient's complete unconsciousness has lasted a prolonged period—usually one to three months—that the condition can be reliably considered permanent. During the initial period of assessment and evaluation, it is usually appropriate to provide aggressive medical treatment to sustain the patient.

Even after it may be clear to the medical professionals that a patient will not regain consciousness, it may still take a period of time before the family is able to accept the patient's prognosis. Once the family has had sufficient time to accept the permanence of the patient's condition, the family may then be ready to terminate whatever life-sustaining treatments are being provided.

- B. The view that there is a major medical or ethical distinction between the withholding and withdrawal of medical treatment belies common sense and good medical practice, and is inconsistent with prevailing medical, ethical, and legal principles.
- C. Given the importance of an adequate trial period of observation and therapy for unconscious patients, a family member must retain the ability to withdraw consent for continued artificial feedings well after initial consent has been provided. Otherwise, consent will have been sought for a permanent course of treatment before the hopelessness of the patient's condition has been determined by the attending physician and is fully appreciated by the family.

This statement is provided as an educational service of the American Academy of Neurology. It is based on an assessment of current scientific and clinical information. It is not intended to include all possible proper methods of care for a particular neurological problem or all legitimate criteria for choosing to use a specific procedure. Neither is it intended to exclude any reasonable alternative methodologies. The AAN recognizes that specific patient care decisions are the prerogative of the patient and the physician caring for the patient, based on all of the circumstances involved.

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