

Persistent vegetative state

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The persistent vegetative state is the most severe form of brain damage. The term was first used by Jennet and Plum to describe patients who, although showing a pattern of sleeping and waking, show no meaningful responses to changes in their environment except at reflex level. This differs from those patients in a coma, who do not open their eyes, and who show no reflex response to stimulation, or “eyes closed unarousability”, due to the reticular activating system of the brain. With this there is often impairment of the cough, gag, and swallowing reflexes. It also differs from Brain Death and Brain Stem Death, where higher cerebral functions cease, consciousness and awareness are lost, along with the voluntary control of movements. Also lost are all brainstem functions such as eye movements, papillary responses to light, cough and gag reflexes, swallowing, and spontaneous respiration. It is now generally accepted that once brain stem death has been established, there is no obligation to continue life support.

The most recent widely accepted definition of Persistent Vegetative State (PVS) is that of the American Medical Association’s Council of Judicial and Scientific Affairs (1990):

“A state of unconsciousness (i.e. loss of self-awareness) where the body cyclically awakes and sleeps but expresses no behavioural or cerebral metabolic evidence of possessing cognitive function or of being able to respond in a learned manner to external events or stimuli”, and where such a state persists for more than a few weeks.” (AMA 1990)

The common feature of all definitions is that there should be no clinical evidence of cortical activity. PVS may arise from cerebral anoxia, from ischaemia, or from damage due to trauma, or rarely due to disease. Before beginning to consider the discontinuation of treatment of PVS the diagnosis must be sure, and this takes time. Some recovery from PVS has been recorded after a period of several months. During the period of initial assessment it is appropriate to provide aggressive medical treatment. As the diagnosis is a clinical one, repeated examinations must be made, and other possibilities eliminated, and the cause defined if possible. More than one specialist should be involved, and it may be helpful to consult a neurologist. The prognosis of PVS is to some extent, determined by the age of the patient and the aetiology of the condition. The longer the period of PVS, the more likely it is that the condition will be permanent.

Once the diagnosis has been made, appropriate treatment should be continued until clinicians are of the opinion that the patient can no longer be benefitted. Such treatment would include high quality nursing care, good nutrition, and stimulation and rehabilitative measures. Life prolonging treatments should be continued until it is certain that recovery of a significant degree is unlikely. This may be many months in some cases. At this time it would be appropriate to consider whether it would be in the best interests of the patient to continue with life-prolonging treatment, which in this case is likely to be hydration and nutrition. This decision must be made by the medical team, along with those who are closest to the patient, and would have his or her interests at heart. The patient’s own views and values should be considered if these are known, and clearly expressed views should be at least given considerable weight in the decision-making process. Practitioners should be aware of Section 11 of the New Zealand Bill of Rights, where it states that “Everyone has the right to refuse any medical treatment”, and that the relationship of this statement to advance directives, is as yet

untested. There exists at least the possibility that the deliberate disregarding of such an advance directive could expose a person to legal redress.

People close to the patient need time to come to terms with the diagnosis and prognosis, and this should be remembered when involving them in the decision making. A decision to discontinue “treatment”, that is nutrition, will have emotional and symbolic importance for those who love the patient, and they will need support and counselling from the medical team. As there are financial implications in the maintenance of a PVS patient, the institution in which the patient is being treated may also be involved in deciding whether to withhold treatment.

Any member of the medical team who has a moral or religious objection to a decision to withdraw treatment cannot be obliged to act contrary to his or her conscience. In such a case every effort should be made to reconcile differences, but if a consensus cannot be reached, the health care professional has a duty to let the family, or those closest to the patient, know that at their request the patient may be transferred to the care of another health professional. Similarly any member of the health care team should be offered the chance to transferring to other duties if they have conscientious objection to any proposal to withdraw treatment. If there is continuing disagreement advice should be sought from a recognised local Ethics Committee. Recourse to a Court of Law is undesirable unless there may be complications under the law, as when the PVS is the result of attempted suicide, or criminal assault, or where there are irreconcilable differences of opinion as to whether hydration and nutrition should be withdrawn.

Guidelines for the management of PVS

1. The diagnosis must be as certain as possible, and initial treatment instituted.
2. While the diagnosis and prognosis are uncertain, nutrition and hydration should be continued. This may have to be for a period of several months.
3. Where there are possible legal implications, as where the patient is in PVS as a result of an illegal act, nutrition and hydration should be continued until the legal situation is clear.
4. Where the diagnosis and prognosis are clear then a decision as to whether nutrition and hydration should be continued must be reached. This decision must be made by the medical team in charge of the case, along with the family of the patient, or those closest to him or her. If the patient has left a clear indication of his views of how he should be managed in such a situation, in the form of an advance directive, or “living will”, these should be accorded very serious consideration.
5. The relatives of such a patient should be given appropriate counselling and support.
6. Any doctor whose conscience prevents him or her from making a decision to withdraw nutrition and hydration on principle, should be allowed to withdraw from the decision-making process.
7. Where there is any persistent disagreement about the decision to withdraw nutrition and hydration by the interested parties, help may be obtained from a recognised local Ethics Committee, set up in accordance with the National Standard for Ethics Committees promulgated by the Ministry of Health. If resolution is still not reached, recourse may have to be made to a Court of Law.

8. When a decision has been made to discontinue nutrition and hydration, the patient should continue to receive full nursing and medical care. It would, however, be appropriate to institute any life-saving measures at this point.
9. Patients in PVS should not be considered as potential organ donors.
10. The death certificate should state that the patient was in a PVS, and that a clinical decision was made to discontinue nutrition and hydration.
11. It is further recommended that anyone having to deal with cases of PVS, and being involved in a decision making process, should read the Report of the Bioethics Research Centre prepared for the Medical Council of New Zealand, entitled “Persistent Vegetative State and the Withdrawal of Food and Fluids.”¹

¹ In preparing this paper the PIAC drew very largely on a report “Persistent Vegetative State and the Withdrawal of Food and Fluids.” This was prepared by the Bioethics Research Centre, University of Otago, at the request of the Medical Council of New Zealand, and was published in February 1993.

A second reference was the British Medical Association’s “Guidelines on Treatment Decisions for Patients in Persistent Vegetative State” 1993.