

Vital Distinctions in Transplantation

Organ and tissue donation can be divided into four general categories. 1.) A living person can give nonvital organs and tissues to another person without causing death, severe injury, or disabling mutilation to self. For example, one might give one of two kidneys, or bone marrow. 2.) Tissues including corneas, heart valves, bones, skin, ligaments and tendons can be taken after death, that is, after the heart is no longer beating and there is destruction of the vital systems, including circulatory, respiratory and central nervous systems. 3.) Vital organs, such as the heart, liver, lungs, pancreas, and intestine are harvested from persons declared "brain dead." Such persons are beating-heart "donors." Calling such living persons "Heart Beating Cadaver Donors" misleads the public and even members of the Academy. Can a cadaver have a beating heart and circulation? 4.) Organs are taken from "non-heart-beating donors (NHBD)." A NHBD is a living person with normal vital signs and a brain that is functioning. These persons are first taken off all life support including the ventilator. When the pulse is no longer palpated, the organs are taken. After the organs are taken, the patient is dead. The public and the Academy are continually misled. To stop a ventilator to get organs for another person is clearly evil actions.

The first two categories encompass organ and tissue donation that may constitute charitable acts, even commendable gifts of life. The latter, however, constitute a form of epivalothanasia ("imposed death") in which the "gift of life" is the immoral taking of the life of the "donor" through the excision of a vital organ or organs.

Note that organs are taken after a declaration of "brain death," not after factual, true death, which is the end of natural life. The person from whom a beating heart is taken could well have been a person not very different from you and me. Most likely, he or she was able to walk and talk, but then something happened--possibly, brain injury from an accident, a stroke, or decreased oxygen to the brain. Now he or she is in an intensive care unit (ICU) and a ventilator is assisting breathing. The ventilator--commonly mislabeled a "respirator"--is a machine that moves air into the lungs. It can be effective only if there are functioning respiratory and circulatory systems to add oxygen to the blood and carry the blood to and from the tissues of the body. The heart is beating; there is normal blood pressure. Intact internal organs and systems maintain the unity and oneness of the body. When a light is shined into the eye, the pupil response is not seen. When ice water is put into the ear, there is no response. No cough or gag would be observed. Other brain stem reflexes might be evaluated. A neurologist makes a declaration of "brain death" using one of many different sets of criteria. The neurologist or hospital can use any of these divergent sets. Thus, a person could be declared "brain dead" if one set is used, but not be declared "brain dead" if another set was employed. Every set of criteria for "brain death" includes an apnea test. ("Apnea" means the absence of breathing.) This test, which has no benefit for the comatose patient and, in fact, aggravates the patient's condition, is done without the knowledge or consent of family members. The apnea test, during which the ventilator is turned off for up to 10 minutes, can induce "brain death" or cardiac arrest. Its sole purpose is to determine the patient's inability to breathe on his own in order to declare "brain death."

When patients declared "brain dead" are treated instead of having their beating hearts cut out, they can continue to live. Pregnant women have given birth months after having been declared "brain dead." Thus, the editor of the *Journal of the American Medical Association* wrote, "Now we are told a brain dead patient can nurture a child in the womb, which permits live birth several weeks 'post-mortem.' Perhaps this is the straw that breaks the conceptual camel's back. Death of the brain seems not to serve as a boundary; it is a tragic ultimately fatal loss, but not death itself."

In the case of transplantation, after "brain death" has been declared, the ventilator and other life support is continued until it is convenient to harvest the "donor's" organs. Everyone present can witness the intact circulatory system via the beeping of the heart monitor and the visual display of the signals from the beating heart, as well as the recordable blood pressure. The intact respiratory system is manifest through the

normal color of the skin. The exchange of oxygen and carbon dioxide can be verified by determining blood gasses (pH, pCO₂, and pO₂). The intact interdependence of circulatory and respiratory systems can be readily observed by applying pressure to the skin, resulting in blanching, which will be followed by return of normal color within a few seconds after removal of the pressure. Through more sophisticated means, an intact endocrine system (pituitary, thyroid, and adrenal hormone production) can be demonstrated. An intact functioning liver can be documented through laboratory tests.

Clearly there are many signs present in "brain dead" patients, including vital signs that physicians and laymen are accustomed to associate with being alive. After the beating heart is excised, however, findings more commonly identified with the fact of death, that is, no circulation or breathing, can be observed. Deprived of organs needed to sustain life, the "donor" will be cold, blue, pale, and stiff--in short, dead.

Are we not being asked to accept two medically distinguishable situations as legally equivalent? To say that a patient with a beating heart, normal pulse, normal blood pressure, normal color, and normal temperature is "dead" is a lie. The force of law will not make it true. Great care must be taken not to declare a person dead even one moment before death has occurred. Death should be declared only after, not before the fact. To declare death prematurely is to commit a fundamental injustice. A person is living even a moment before death and must be treated as such. Every time a heart is taken for transplant, it is a beating heart that is stopped by the surgeon just prior to excision. It takes about an hour of surgery to remove the heart. During this time, it is common for the so-called "donor" to be given a paralyzing drug, but not an anesthetic. It has been reported that when the incision is made to take the organs, there is an increase in heart rate and blood pressure. Could this occur if the person were dead? The answer is no. A doctor or other medical personnel must never impose death on a patient. Imposed death in Greek is (*epivalothanasia*.)

It is easy to move one's emotions with images of organ recipients resuming "normal lives" after they have received a heart, but what about the life of the donor? Was the donor in fact dead? If there is any doubt about the fact of death, may one carry out an action that will impose death on another? Who sheds tears for the victims of utilitarian euthanasia?

It is wrong to impose death on an innocent human being and to participate in its imposition. Likewise, we should not encourage others to participate in organ transplantation unless all doubts about death have been removed. Everyone getting a driver's license ought to be informed of the truth about "brain death" and organ transplantation before answering the question, "Do you want to be an organ donor?" After all, your life may well depend on your answer.

Paul A. Byrne, M.D.
577 Bridgewater Drive
Oregon, Ohio 43616
(419) 698-8844