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End-of-Life Issues: Brain Death and Organ Donation

 Americans know the story: An unfortunate victim of an unexpected brain hemorrhage or lethal vehicle accident is treated by emergency personnel and rushed to the hospital. Doctors and key personnel swarm around the patient, rapidly starting fluids, waste catheters, and intubating the victim in an attempt to stabilize vitals and save her life. Thanks to the advancements in medical technology, breathing and heart rate are restored and things start looking good, but this is a false hope and the doctors know it. They’ve seen this many times before; the patient was deprived of oxygen for too long or there is a massive brain injury causing uncontrollable cell death. The victim is tested using several bedside and/or instrumentation readouts and determined to be brain dead. There is a glimmer of heroism to this tragedy, however, because the victim has enrolled to be an organ donor and the family selflessly agrees with their loved one’s wishes. More doctors rush in and the focus shifts from the failed efforts to save the patient to a reinvigorated effort to preserve their organs. The body is kept on life support and taken to an operating room, where several organs and tissues (most commonly the heart, kidneys, and corneas) are removed for transplantation into one or several dying people – most of whom have been waiting a very long time and are very near dying themselves. The unfortunate loss of one has been transformed into a sacrifice to save many, and this story closes as another bittersweet testament to the ‘Gift of Life’. With slight variances in legal processes, permission requirements, and death certification, this practice is widespread and generally accepted everywhere in the United States and Europe. In eastern countries such as Japan, however, this is not the process envisioned by the population. In fact Japanese citizens are more likely to envision a group of ‘mad scientist’ style doctors hovering over the body of a victim who is not yet lost, pressuring intensive care staff to declare death quickly so they can chop up the body and hock it for parts. Public consensus in opposition to organ transplantation and the declaration of brain death has been the primary reason that organ transplants were not accepted in Japan until the late 90’s. Today, organ transplantation has been legalized in Japan, but there is still a great deal of debate surrounding the concept of brain death. Western transplant surgeons who have been involved in the eastern transition to accepting the new death view their efforts as an attempt to catch Japan up with the times. The interesting fact in this effort is that the focus of medical research regarding brain death in Japan is completely absent from western society; if Japan accepts the majority view of the rest of the world this school of study could be lost. Lifesaving technology has reached a sort of plateau in the west because there is no need for technology to extend the life of victims very far beyond brain death. Shouldn’t there be a demand for improvements to lifesaving procedures to keep these unfortunate souls from reaching the point of no return? If the answer is ‘yes’, then perhaps getting the whole world to adopt an equal mindset in regards to death and organ transplantation is not such a good idea. The following paragraphs will outline the numerous ethical debates that pertain to death and organ donation, many of which continue to drive a wedge between medical professionals and public opinion in the east and west. Despite reasonable demands to settle these conflicts, a bipartisan opinion on these subjects facilitates a much greater potential for the advancement of medical research and technology.

 To better understand the causes of the ethical debates about end-of-life issues, one must first delve into the political and cultural scenarios taking place on both sides. For this purpose, Margaret Lock’s *Twice Dead: Organ Transplants and the Reinvention of Death* is a perfect resource. In her book, Lock outlines specific cases from the United States and Japan, and delves into some very deep understanding of the principles and history that generate the ethical values that cause this debate. In America, the trust in medical providers with regards to organ transplantation can be attributed to two factors. First, the morbidity of human organs has been diluted over the ages since Medieval Europe, where dissections of human bodies took place for the purpose of scientific discovery. The other factor is the competitive market in which we live; doctors and surgeons are dependent on reputation, which ensures that their work is reliable and high-quality. Permission to procure organs is up to the patient, who elects ahead of time whether or not they wish to donate. The wishes of the family are often considered as well when it is possible, and sometimes living wills play into this event as well. The Uniform Determination of Death Act outlines the use of a battery of tests known as “The Harvard Criterion” to define death as an event; a person is legally dead when cerebral death has been determined (Lock 89). In Japan, medical professionals are viewed with distrust, which is also a result of two factors. Several scandals involving transplant surgeons falsifying testimony in highly publicized murder trials have led to a negative public view of organ transplantation. In addition, Japan has a universal healthcare program, which results in a marginal incentive for doctors to perform above expectations. The procurement of organs is the decision of the family, plus the victim must have a signed donor card, which makes quickly preserving organs an arduous process. The new Organ Transplant Law in Japan uses a similar set of tests known as the “Takeuchi Criterion” to determine whole-brain death, but death here is defined by a process as opposed to an event (Lock 125). This stems from the much higher authority of family over the individual, and most of this ‘process’ describes the several ritualistic steps for a family to mourn their lost and transition them into ancestry. This tradition affects transplantation because many families still believe in *Reikon*, “*Reikon* eat and drink, express emotions, and feel bodily sensations; surviving relatives have an obligation to keep the departed soul or spirit happy and must not give it cause for anger” (Lock 212). For some families, this means that sending an ancestor to the afterlife incomplete will anger her *Reikon*, which will then take revenge on her ancestors. It is these qualities of political and cultural differences between Japan and the Unites States that leads to ethical debates about defining death and organ procurement for transplantation.

 The first point of debate in this instance is the issue of defining death. At the beginning of the nineteenth century, the definition of death made a transition from putrefaction to cardiac and lung death. It is oft thought by neurologists who have publicized their view of brain death that it is the direct result of the interests of transplant surgeons. The desire to have the definitive point of death moved forward in time seems to solely benefit those same interests. This tends to draw suspicion in Japanese societies, who are concerned the interests of doctors will shift from the priorities of the patient to that of preserving his organs. This is in sharp contrast to the ideas held by their peers in the U.S. that doctors only consider transplantation after brain death has been determined. This belief is also contingent upon the fact that American society has accepted brain death as the definitive event of dying. Considering the conditions of this acceptance leads to yet another cornerstone in the debate on end-of-life ethics. Organs don’t last long after the heart stops beating, but with brain death catheters can be inserted into the patient’s arteries to pump in perfusion fluids that preserve the organs before the heart stops. This has resulted in numerous murder accusations in Japan while organ transplantation is still in its youth. Families who don’t quite grasp what is going to happen when they consent to organ procurement from a brain dead family member are devastated to find out they didn’t wait for the heart to stop. Other arguments arise from one of the tests used to determine brain death. This test is called the Apnea Test and involves turning off a ventilator to see if the patient starts breathing spontaneously. It is thought that this oxygen deprivation only places the patient at further risk and may hasten or even cause the point of no return. There is also argument about futility versus fatality in defining death. For example, patients in a permanent vegetative state can often times can breathe independently and have certain, though limited, awareness. However, in America, certain parties involved with the patient can petition to the court system to have the patient declared dead and their life support removed. This is a frightful thought, considering the numerous documented cases of people recovering from long comas and mistaken declarations of brain death. It should be noted here that the criterion for determining brain death have improved drastically, and there have been no such cases in decades. Great caution is needed to ensure that there is no chance of hope before deciding that someone has joined the afterlife. On that point, considerations must be made for the afterlife itself, and the many different belief systems for what goes on when we ‘pass on’. Respect for the dead gives many a bit of reserve when thinking about allowing someone to be cut open and transformed into a commodity. Even more believe in an afterlife and worry about several factors that include the potential dismemberment of their loved one’s soul. In Japan, this worry has even more significance, as continuity holds great power within the traditions of Japanese families. There are several recipients who believe that they have changed as a result of their donor’s personality, despite not knowing much at all about the donor. One young man even switched to an all Italian food diet after he incidentally learned the ethnicity of his donor. The ethics that arise from brain death and organ donation continue to step interchangeably in this fashion, and numerous additional arguments can be sought out by those who oppose transplantation and brain death as it is widely accepted in the west.

 In the meantime, our group would like to reflect upon our view of the general subject of whether or not Japan is truly behind the times. In seeking solutions to these dilemmas, we have found that it may be easiest to reduce each opponent to a single characteristic. In America, we value utilitarianism: the sacrifice of a few saves many through the gift of life. Surgical techniques and medications that improve survival and rejection rates make organ transplants more and more reliable every day. Taking the organs from a “living cadaver” and allowing it to finally die is a stroke of mercy to the hopeless patient, and greatly reduces the costs of continuing care on the surviving family (Lock 1). There is a dark cloud on the horizon, however, in the form of a diminishing supply of organs. Automobile accidents are becoming continuously less lethal, which may promote a demand for an even newer, earlier definition of death. In contrast, Japan takes the approach of humanitarianism: reservations about declaring brain death and waiting until the last possible moment to procure organs for transplantation guarantees the patient the best fighting chance at surviving a traumatic event. Life-saving techniques are heavily researched and have made notable advancements such as using induced hypothermia to significantly reduce brain swelling and neuronal cell damage in patients very near brain death. The surviving family is not pressured to make hasty decisions about transplantation, giving them more time to cope with the sudden loss of a loved one. Some Japanese and American researchers are even striving for new life-saving techniques like lab-grown tissues that may render allografts (transplantation between two genetically non-identical members of the same species) obsolete. If Japan is influenced to deter from focusing on the preservation of life, these advancements could be lost or even significantly delayed in their progress.

 Considering death and organ donation can lead to some very conflicting ideas about the implications of defining life and death. However, this duality in the world of medical ethics fosters a better environment for future improvements in life-saving techniques. These considerations begin with establishing an understanding of the two conflicting points of view regarding brain death and organ procurement. These culture differences set the stage for the ongoing arguments about the definition of death, the hasty nature of commodification upon the determination of death, and the violation of spiritual continuities. For some reason, the consensus reached by western medical society is that Japanese professionals and patients must be swayed towards a unified point of view on these subjects. We disagree with this idea, and argue that cultural differences carry the potential of pioneering a better future for the global advancement of medical techniques. In the meantime, there are numerous Japanese men and women in desperate need of donated organs, so the outright rejection of brain death and organ transplants is inappropriate. The Japanese government has legalized organ transplants and is working to improve the organizational structure of their coordination systems, so this issue is being addressed, but a complete overhaul of social values is not necessary. In summation, the proper ethical approach to this subject is to adopt a *laissez-faire* attitude about the differences between eastern and western culture. By removing the pressures of ideological unity from the world medical market, the diversity of research towards new medical advancements will be ensured.

# Works Cited

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