## James L. Holly, M.D.

What is the Right and Righteous Decision when the Brain is Dead but the Heart is Not By James L. Holly, MD Your Life Your Health *The Examiner* January 16, 2014

The nation has been gripped by the story of Jahi McMath, a 13-year old. who suffered a tragic accident following surgery. The attorney for the family is quoted in the press as saying, ""This child was sitting on death row...this was a facility that was hell bent on ending this child's life today." As an advocate for his client, the attorney, who according to his website specializes in "whistle blower, fraudulent claims and Qui Tam Law," is representing his client well, but unfortunately with emotional language which further confuses the situation. This beautiful and greatly beloved child was not "sitting on death row." Innocent, precious and suffering a tragic outcome of a simple medical procedure, no one wanted this child to die. And, no one was "hell bent on ending this child's life today," or any day.

My perspective on this case is based on my personal pro-life beliefs in which I am opposed to abortion, euthanasia, death penalty, or assisted suicide. I am supportive of hospice, comfort care and the compassionate care of those who are in the last stages of life and/or who have died but whose bodily functions are being sustained by extraordinary means such as forced feeding, artificial ventilation, or other heroic means.

All healthcare providers of faith and who believe in the power of prayer never want to discount the possibility of a miracle taking place. However, having personally prayed for the resuscitation of dear, personal friends, I must confess that I have not seen a person who has died brought back to life. Furthermore, the desperate desires of loved ones to see or experience evidence of life in those who have died while on life support often results in family members reporting, as has Jahi's, that "when her mother speaks and touches her," she moves, and "that a pediatrician has seen Jahi and has sworn she is not dead." In dealing with patients, sometimes, I have been unable to clearly say that a patient did not respond when addressed, even when subsequent examinations showed irrefutably that the patient was brain dead.

In order to protect patient confidentiality and to comply with HIPAA, the following stories will exclude gender, age and circumstances. It is possible that someone might think they recognize their case but in fact no person is identified in these stories. A great deal has been made about the fact that Jahi's heart is still beating. Because of her youth, Jahi's heart will continue to function for as long as oxygen and nutrients are made available to her. Unfortunately, because her brain is not functioning, she will never voluntarily breath (respire) in order to supply her heart with oxygen and she will never again voluntarily take in nutrients in order to supply energy to support her bodily functions.

There was a time when a distinction was made between "legal" death and "medical" death. The former was determined by the heart ceasing to function; the latter was made by the brain ceasing to function. As technology has advanced, not only do we now have the ability to keep a person alive longer, we have the ability to maintain bodily functions after the brain has died. The heart is one muscle which is not dependent upon the brain to continue its function. The heart's autorhythmicity means that it has the ability to function independent of the function or lack of function of the brain. The heart and the brain are both "greedy" organs, which simply means that while they function, they will take the nutrients and the blood supply they need without regard to detriment of the other. And, if the brain ceases to function, the heart will continue to function as long as the heart receives oxygen and nutrients.

In a case similar to Jahi's, the patient's brain had died due to the absence of oxygen. When the medical power of attorney recognized that the brain had died and requested that the artificial ventilation be stopped, it was my task to turn the ventilator off. The patient had died, but the heart was still functioning. The decision was made not to donate any organs. I felt a moral obligation to stay with the patient while the consequences of removing the oxygen supply to the heart was carried out. The heart went through the steps of dying. As the heart tried to supply oxygen to the body, the heart rate increased, when that did not supply the needed oxygen because the dead brain did not function to cause the patient to breath, the heart began to show stress with the T-waves inverting and the QRS widening, both evidences of impeding heart attack due to oxygen starvation. Finally, he heart slows down until it ceases to function. The patient's brain was dead and therefore there was no pain, no feeling, no suffering.

I held this patient's had while the process of the heart dying took place, as I have held the hand of those who died while their brain was still functioning but other essential organs of their body failed. The family had made the right decision in this case but that did not make the process any easier. Just as the process will not be any easier for Jahi's family once they come to the same decision.

The second case was similar to Jahi's because the family, the doctors and the hospital had lost confidence and trust in one another. The family had obtained an attorney and after getting an injunction to prevent the removal of life support, that attorney asked me to review the case. As is often the case these records were voluminous and it took eight hours to review them and to dictate a thirty-page summary of the patient's excellent care.

In this case, as in Jahi's, the family were wonderful people and the doctors had done an excellent job. My review showed no negligence in care but one test had not been done which would let the family know if there was hope for their loved one's recovery. That test was a Cerebral Blood Flow test. While there are rare occasions when there is temporary limited blood flow to the brain after brain death, there is never a time when a brain remains alive in the face of no cerebral blood flow. When this test was done and showed no blood blow to the brain, the family was at peace in terminating the ventilator support.

No economic value can be placed on a human life but once life is over, it can be considered as

futile to continue to use expensive and limited resources to prolong the heart function and to prevent the heart death which signals the end of life. These are not easy decisions and they should be made in consultation with family, healthcare providers, chaplains and other spiritual advisors. They must be made knowing that death is not a failure of life but is an inevitable part of life. The difficulty is compounded by tragedy, particularly in the young. As this tragedy unfolds, we can only pray for this family, knowing how difficult it is for the family to accept the inevitable.