

The day I flatlined

Anthony J. Marolda

I was in a recovery room at Lahey Hospital after having had a routine heart diagnostic procedure. The last thing I remember was that I was sitting up in the bed, checking my cellphone. The nurse was close by at her desk doing some paperwork. Then everything went black. I had a sudden cardiac arrest. This means that my heart had abruptly and unexpectedly stopped beating. As a result, my blood stopped flowing, I stopped breathing, my pupils dilated, and I lost consciousness within seconds. I had flatlined and, for all intents and purposes, I was dead.

Currently, a patient who suffers a sudden cardiac arrest in a hospital has about a 22% chance of being resuscitated and surviving to discharge. That means that four out of five patients who experience such an event don't make it. Pretty bad odds! And it is much worse outside a hospital. With no expert medical personnel, or an automatic external defibrillator close at hand, fewer than 10% of sudden cardiac arrest patients survive.

You may remember a

movie made in 1990, re-made in 2017, called "Flatliners." In that film, five medical students experiment using drugs to purposely have a sudden cardiac arrest. Their idea was to have a "near-death" experience and get a glimpse of the afterlife before their friends revived them.

But in real life, not all patients who survive their cardiac arrest have a near-death experience. Only about one in five of them do.

Over the years, there have been hundreds, if not thousands, of anecdotal reports of near-death experiences from many countries and cultures. The similarities in these stories raised the interest of the scientific community, and, as a result, there have been several rigorous scientific studies of the phenomenon.

For example, the renowned international medical journal *Lancet* published a study of near-death experiences by patients with sudden cardiac arrest. It was conducted by a Dutch cardiologist, Pim van Lommel.

The experiences of his patients tended to be like many of the other near-death experiences found in the literature. They often entail being conscious, but

knowing you are dead, and finding yourself in a dark tunnel with a bright light at the other end. When the subject emerges into the light, they find themselves in a most beautiful place, and having feelings of total serenity, security, warmth and unconditional love.

Many experiencers also see long-dead relatives, friends and even pets. The patient can interact with them and it all seems very real and comforting. Many of these patients claim afterward that their experience changed their lives in a tangible and positive way.

Other sudden cardiac arrest patients claim to have a different kind of incident. It is an out-of-body experience that also feels very real to them. In these cases, the patient believes they are floating above their hospital bed, looking down on the scene where the medical staff is trying to resuscitate them. Many patients can recount the actual actions and conversations that took place, confirmed by the participants. Yet they had flatlined, their brains were completely inactive, and they had no senses.

Many doctors or scientists have tried to develop a reasonable medical explanation

for these experiences. All sorts of theories have been proposed, but there is no scientific consensus on how these events can happen.

One of the most interesting aspects of near-death experiences is the idea of "consciousness" and how it relates to this mysterious phenomenon. Most dictionaries define consciousness as "the fact of awareness by the mind, of itself and the world." But, when blood stops flowing to the brain because of cardiac arrest, the victim's brain activity ceases and they quickly lose "consciousness." Yet, these victims still claim to have such conscious experiences.

Van Lommel concluded in his *Lancet* article that the results of his study demonstrate that the patient's awareness did indeed continue after all brain activity stopped. In his summary, he raised the question "If consciousness is a function of brain activity, as most scientists believe, how could consciousness be experienced after the brain no longer functions?"

Von Lommel answered his own question in a later book he wrote, "Eternal Consciousness." He claimed in the book, like some philosophers have in the past,

that human consciousness functions independently of the brain. The brain, he says, "is just the receiver of the signals generated by this (higher-order) consciousness, much as a television is the receiver of signals from a television station." This concept, some philosophers say, is evidence of the existence of the soul, and the near-death experience provides a glimpse of the afterlife. In the *Flatliners* movie, it is this glimpse that the student doctors were seeking.

Other doctors, trying to explain the conscious experiences of cardiac arrest patients, attribute it to the act of heart massage in the resuscitation process. The result of the massage, they say, is that there is some blood flow to the brain. And that's what explains the consciousness required for the near-death experiences.

On the other hand, von Lommel's view is supported by many neurologists. They say that until the heart starts beating again, there can be no brain function.

Not many neurologists, however, support the idea of consciousness operating independently of the brain. A few, like Dr. Donald Hoffman, professor of cognitive science at the University

of California, Irvine, are hypothesizing exactly that idea, and working on developing a mathematical, scientific analysis to prove it.

In my case, I am obviously among the one in five patients who suffers a sudden cardiac arrest in a hospital and survives. After everything went black, the next thing I knew, I was looking up at a bearded, male nurse who I later learned was named Eddie. Eddie and the other medical professionals in that recovery area went into quick action and brought me back within a few minutes. As I returned to fuller consciousness, I remember the crowd around me and the frantic looks on their faces, but nothing more.

The doctor in charge of my case called my wife to tell her what happened. When she arrived to see me at the hospital, I related to her how disappointed I was. I had a sudden cardiac arrest and did not find myself in a dark tunnel or come out of it into the bright light to find myself in a beautiful place. Or see any relatives or pets.

Now, that would have been a great story to be able to tell. Maybe next time.

Anthony J. Marolda is a resident of Annisquam.