

The 50th Anniversary of the First Successful Human Organ Transplant

December 23, 1954 was a day that changed the lives of countless people all over the world. I have been asked many times to retrace the steps of the first transplant, its impact and long-term effect. Each time I recount these milestones I think not of what any one of us has done individually, but rather what we as a team have achieved. As the famed UCLA basketball coach John Wooden once said, "The secret of stardom is the rest of the team." I did not do it alone. The transplant program included Dr. George Thorn, Chief of Medicine, Dr. Francis Moore, Sr., Chief of Surgery. Dr. Gus Dammin, Chief of Pathology and Dr. Jim Dealy, Chief of Radiology.

Dr. John Merrill, the nephrologist appointed by Dr. Thorn, used hemodialysis to prepare Richard Herrick for the surgery. I was the surgeon who performed the operation. Dr. J. Hartwell Harrison, Chief of Urologist removed the kidney from the donor in an adjacent operating room.

For over two years working in the surgical research lab, I had perfected the transplant operation in dogs. We had solid evidence that a transplanted kidney in the absence of immune rejection could function permanently. But no matter how experienced and confi-

dent we were that we could someday succeed in humans, it all would have come to nothing without the selflessness of a young Veteran of the Korean War. I am referring to Ronald Herrick, a healthy 23 year old whose identical twin brother, Richard, was near death from chronic kidney disease.

In the hopes of saving his brother's life, Ronald agreed to serve as a living donor, to give his brother the one thing that he needed most: a new kidney. Because we knew that skin grafts between identical twins could function permanently, we believed the same would apply to kidney transplants. On several occasions before the operation, our team met with the Herricks and their family, providing information about preparation, risk, and possible complications. The Herricks decided to put their trust in our hands.

Doctors are trained to "do no harm". The thought of performing an operation on a healthy person not for his own benefit was radical. The only benefit to Ronald was the possibility of saving the life of his brother Richard. That is all. Yet for Ronald that was enough. On the eve of the operation, Richard wrote a note to his brother that read, "Get out of

here and go home." Ronald jotted off a quick reply: "I am here and I am going to stay." Ronald's gift prolonged his brother's life eight years, long enough for him to marry the nurse who had tended him and have a family. Following the successful Herrick operation, surgeons, physicians and scientists worldwide continued their transplantation research with renewed enthusiasm. It paved the way for doctors to transplant not only kidneys but livers, hearts, lungs, intestines and other tissues and organs.

It is appropriate on this occasion to acknowledge not only my colleagues and the Herrick family but also the far-sighted founders of medical schools and hospitals, the workshops that have allowed all of us to work so productively. At the 25th anniversary of the Herrick operation, Tom Starzl correctly summarized the occasion:

"If gold medals were awarded to institutions instead of individuals, the Peter Bent Brigham Hospital...would have qualified...The qualities of leadership, creativity, courage and unselfishness made the Peter Bent Brigham Hospital a unique world resource for that moment of history."

In 1982, twenty-eight years after our identical twin operation, Peter Medawar, the acknowledged doyen of transplantation, had shifted to studying the immunology of cancer. He reflected on the Brigham operation with typical Medawarian prose:

"Physicians will arise who feel just as much at home in the laboratory as in the cancer ward. Just

one brilliant break is needed, akin to the first brilliant kidney transplant in the Peter Bent Brigham Hospital in Boston, and then recruits will come forward by the hundreds."

The author George Elliot once wrote, "Prophecy is the most gratuitous form of error." Therefore, to avoid error, I will make no prediction about future medical

progress. Nevertheless, I state with certainty that organ transplantation will forever remain as one of the outstanding gifts to the body and soul of mankind.



Joseph E. Murray, MD

Brihan and Woyeo's Hospital
Boston, MG.