

RENAL TRANSPLANT NEWS

By Gordon Lore

NKF Develops Transplant Recipients' Bill of Rights

Acknowledging that transplant recipients have unique healthcare challenges not specifically addressed in the national debate in Congress on the Patient Bill of Rights, the National Kidney Foundation (NKF) has developed the Transplant Recipients' Bill of Rights and Responsibilities (TRBRR) through its Transaction Council in collaboration with 10 transplant organizations, including the United Network for Organ Sharing (UNOS) and the American Society of Transplantation.

The TRBRR focuses on maintaining physical and mental health following a transplant. The rights to quality care, respect and emotional support, and providing accurate medical information are covered. The document also states that recipients have the right to have their correspondence forward to the family of the deceased donor and the responsibility to know, identify, and report any signs of organ rejection.

The Transplant Recipients' Bill of Rights and Responsibilities was published in poster and booklet form for distribution to patients and transplant centers.

Organ Transplants Rise in 2000; Largest-Ever Increase in Living Donors

The number of organ transplants rose 5.4% in 2000 compared to 1999, according to data from UNOS and the US Department of Health and Human Services.

A total of 22,827 transplants occurred in 2000, an increase of 1,172 over the 21,655 transplants in 1999. The number of living donors in 2000 totaled 5,532, a 16.5% increase over 1999, the largest one-year increase ever. Cadaveric donations rose by 2.7%--to 5,984.

“We must remember that increasing living donation alone will not save enough lives,” cautioned Patricia Adams, MD, UNOS president. “We must continue to educate the public about the importance of organ donation...”

New Storage Device May Keep Organs Viable Longer

A research team at the University of Chicago Hospitals reported using a machine simulating the warmth of a human body to keep a kidney functioning for nearly 24 hours. The team said the technique could help preserve organs for transplantation for longer periods of time, stated an Associated Press report published in the *Los Angeles Times*.

David Cronin, MD, one of the researchers, said the technique could test organs to determine if they are acceptable for transplantation. Alan Langnas, MD, chief of Transplantation at the University of Nebraska Medical Center, Omaha, believes the technique may have “important implications” in kidney transplantation. He added that the technique involving pumping warm blood could aid in reducing the number of kidneys that don’t work immediately after transplantation because the organs are kept in cold storage prior to the operations.

TransMedics, Inc., Woburn, MA developed the organ preservation machine. It utilizes a heart-like pump and tubes to push blood into the kidney, stored at about body temperature. The kidney then filtered the blood and produced urine. The organ was also fed with oxygen and nutrients. Waleed Hassanein, MD, president and chief executive officer (CEO) of TransMedics, said the machine is being tested at nine US and British hospitals. The company will also submit its trial results to the US Food and Drug Administration and hopes to market the machine sometime next year.

Is Pulsatile Preservation a Breakthrough in Preserving Kidneys?

A technique known as pulsatile preservation has been used in the transplantation of at least 31 kidneys by the Gift of Life Donor Program, Philadelphia, PA, reportedly the largest organ donor program in the country.

The technique involves pumping a cold solution continuously through the blood vessels of the kidney or other organ. It also delivers nutrients to the kidney, and blood flow can be monitored as well as the kidney's ability to process urine. Other data can also be generated about the kidney's ability to function.

Pulsatile preservation also apparently makes it possible to use the organs of donors up to 80 years of age.

“In the past, we did not educate people in their 60s or 70s about donation because we did not think of them as donors,” admitted Howard M. Nathan, president and CEO of Gift of Life. “Now that we are able to think of them as potential donors, we need to begin including them in our public education and in our outreach to hospitals.”

Can a Kidney/Pancreas Transplant Improve Hypertension in Diabetic Patients?

While hypertension continues to persist in many patients suffering from *diabetes mellitus* following kidney transplantation, “the impact of control of diabetes as well as kidney failure on hypertension by combined kidney and pancreas transplantation has not been studied,” according to researchers from the Northwestern University Medical School, Chicago, IL. An abstract of their findings was published in *Circulation* (2001;104:563).

The researchers' studied 111 patients with type 1 diabetes who underwent a pancreas transplantation (108 of these had a combined kidney/pancreas transplantation) and another 28 who underwent an isolated kidney transplant. The mean blood pressure was 151/88 and 151/83 mm Hg for the kidney/pancreas and isolated kidney transplant patients, respectively. This decreased to 134/77 one

month after the combined transplant and decreased even further to 126/70 after 18 months. This reduction occurred despite a decrease in antihypertensive medications and the institution of immunosuppressive medications.

“Successful kidney/pancreas transplantation results in a marked improvement in hypertension treatment that is not observed in patients undergoing isolated kidney transplantation,” the clinicians concluded. “These data underscore the importance of diabetes in the pathogenesis of hypertension in patients with diabetes and kidney failure.”

Scientific Registry Looks at Organ Transplant Data

Data released during the summer by the Scientific Registry of Transplant Recipients (SRTR) show that the number of patients needing a transplant was more than triple the number receiving them during 2000.

In 2000, there were 22,884 transplants performed in the US, leaving about 76,000 patients still on the waiting list for an organ. The reports contained data from 59 organ procurement organizations and approximately 1,000 transplant programs operating from 1995 to 2000. The information ranges from the characteristics of organ donors and transplant candidates to survival rates for both transplant recipients and those still on the waiting list.

“Patients are our first concern, and sharing these data will improve patient care by providing more information to all involved in transplant procedures,” according to Philip J. Held, PhD, SRTR project director and president of the University Renal Research and Education Association, Ann Arbor, MI. “Healthcare professionals, patients, and their families will be able to use these data to help ensure better outcomes for transplant recipients.”

For more information on the SRTR, go online to www.ustransplant.org or call (734) 665-4108.

Patients Losing Renal Grafts Are Not Relisted For Second Transplant

The majority of patients who lose their initial kidney graft are not relisted for a second transplant procedure, according to clinical researchers from the University of Florida College of Medicine, Gainesville. The study data were published in the *American Journal of Kidney Diseases* [2001;38(1):31-35] and reported by Reuters Health.

Richard J. Howard, MD, and his colleagues obtained data for 438 patients who lost their first kidney graft or died with a functioning graft between January 1, 1988, and December 31, 1997. Two hundred seventy of the patients returned to dialysis. Of those, only 97 (35.9%) were placed on the waiting list for a second transplant procedure.

In more than 10% of the patients, noncompliance with the immunosuppressive regimen was a significant factor in the graft loss. The researchers indicated that, for those patients who lose a graft because of noncompliance, “the transplant center should ascertain that these individuals would be compliant with immunosuppressive medication before they are relisted.” They also recommended that noncompliance should be taken into account regarding “the point system that influences allocation of cadaveric kidneys.”

Clinical Trial For HIV Patients Needing Organ Transplants

While many in the medical community are hesitant about the prospects or feasibility, researchers in San Francisco, CA, are organized a large clinical trial for HIV-positive patients who are in need of organ transplants, according to an Associated Press (AP) story.

The AP reported that medical professionals “have only recently started to support organ transplants in patients with HIV, but many are still skeptical and question whether the operations are warranted in people who have shorter lifespans and more health problems than other patients.”

In 1999, the United Network for Organ Sharing (UNOS) received five reports of transplant in HIV patients. This number more than doubled to 11 in 2000.

The University of California, San Francisco, Medical Center said it is planning to recruit up to 15 hospitals for its study.

Elks Become First Major Nonprofit Organization to Support Federal Transplant Program

During its 137th national convention in Philadelphia, PA, this summer, the Benevolent and Protective Order of Elks (BPOE) and US Department of Health and Human Services (HHS) Secretary Tommy Thompson have signed a pledge in which more than one million Elks members can instantly enroll in HHS' Workplace Partnership For Life organ transplant program. The Elks became the first major nonprofit organization to join the government program and pledged to help heighten public awareness of the need for organ donors.

“There is no greater gift than that of life, and the Elks are proud to help give that gift,” stated Dwayne Rumney, Elks national president. “Because of our long commitment to charity, it was only natural for our entire membership to be so enthusiastically in support of this program”

Will Pigs Ever Be a Viable Source of Human Organs?

Despite recent doubts about the future of xenotransplantation, the idea of using pigs as an eventual source of human organs still has some advocates. David Sachs, MD, of Massachusetts General Hospital in Boston, believes they can be “a potential donor for almost all of the internal organs,” stated an ABC News report.

Sachs and his colleagues are focusing on a particular breed of pig—inbred miniature swine—at a private research facility. But there are still “major obstacles” to overcome.

“The immune response, or the rejection of a pig organ, is much stronger than the rejection of a human organ,” said Julia Greenstein, president, Immerge Biotherapeutics, Boston.

Researchers in the field of xenotransplantation, however, say that problem can be solved by genetically modifying and cloning the pigs. An additional concern that a

pig virus might infect human recipients could be solved by a new breed of pigs that do not seem to transmit the virus. Despite the known and unknown risks, however, the researchers believe that human testing is only 3-5 years away and that xenotransplantation could be a reality within the next decade.

Transplantation Myths Still Exist, The Sharing Network Reports

While about one-quarter of New Jersey residents are willing to donate their organs, the majority of residents in the state still believe the myth that those who sign organ donor cards are treated less aggressively at hospitals, according to a survey conducted by the Eagleton Institute of Politics and commissioned by the New Jersey Organ and Tissue Sharing Network (The Sharing Network).

The survey found that three out of every five New Jersey residents believe there are times when those who have signed organ donor cards may not be treated as thoroughly as someone who has not expressed a willingness to be a donor when hospitalized. Eight percent said this practice happens often. Nearly one-quarter (23%) said it sometimes happens, and 31% believe it rarely happens.

“The decision to sign an organ donor card will in no way affect the level of medical care for a sick or injured person...,” stated Joseph Roth, president and CEO of The Sharing Network. “Signing an organ donor card does not mean that you will receive less than the best medical care available.”

In 1998, The Sharing Network launched the New Jersey Organ and Tissue Donor Registry, a statewide database aimed at generating greater donor awareness. Since it was founded, The Sharing Network has more than tripled the number of organs recovered in the state for transplantation.

For more information, call The Sharing Network at (800) SHARE-NJ, e-mail: tsn@sharenj.org, or visit their web site at www.sharenj.org.