

Largest US Kidney Chain Resumes Transplants



The largest ongoing single-site kidney transplant chain in the US will continue with six transplant surgeries scheduled for the week of 7 July. Since early December 2013, 21 living donors and 21 recipients have participated in the paired organ exchange at the University of Alabama at Birmingham (UAB) Hospital. The chain was paused on 23 May.

The coordinator of the kidney transplant chain, Jayme Locke, MD, is also the surgical director of the Incompatible Kidney Transplant Program at UAB's School of Medicine. Locke credits the success of the program to the dedication of the transplant team, which is comprised of surgeons, nephrologists, nurses, OR staff and lab technicians. Equally as important is the altruism of the first donor whose gift of one of her own kidneys to an unknown recipient gave life to the chain, and the continued generosity of subsequent organ donors.

Kidney Chain Infrastructure

Kidney chains work by having a family member or friend of each kidney transplant recipient donate a kidney to an unknown person in need, who becomes part of the chain. In the case of the UAB chain, Alabama resident Paula Kok offered one of her kidneys to a stranger on the transplant list late in 2013, and since then a series of transplants has been made possible as recipients' relatives donate their organs on behalf of their ill friends or family members.

Patients and donors from nine states have traveled to Alabama for the transplants. UAB is recognised as a national leader in kidney transplants, having performed more living donor surgeries since 1987 than any other American centre. Its Incompatible Kidney Transplant Program has been a work in progress for over ten years.

Improving Compatibility

A unique aspect of the program at UAB is that it does not require perfectly compatible matches, as national paired-exchange programs do. Patients at UAB benefit from pretreatment, which works to resolve incompatibility in blood type or HLA. "We have the ability to use our paired exchange and incompatible transplant programs in tandem to identify and connect potential living donors with recipients who have no other options, multiplying the number of successful transplants that can be performed," said Locke.

The combination of paired donations and desensitising techniques has allowed the UAB kidney chain to remain at a single centre; 41 of the 42 surgeries performed so far took place at UAB Hospital. The other transplant involved 15-year-old Ryane Burns, whose surgery was performed at Children's of Alabama. UAB's program is thus the only one in the southeastern US to offer paired donation to patients younger than 18 years old.

Call for National Coordination

In the United States, the number of people waiting for a kidney transplant exceeds 100,000. Approximately 11,000 transplants take place each year, but 15,000 of those waiting for a donation will die before they receive one. Locke hopes that a national program involving kidney centres across the country will be established to bring more attention to the crisis and to take advantage of the success of kidney chains.

"If we could do this, we could optimise living kidney donation in this country in a way that we have never been able to do before, and I think we can actually begin to make a significant dent in our waiting list," she said. Locke and her colleagues at the Incompatible Kidney Transplant Program are also involved in projects which focus on therapies, preventing transplant rejections and helping patients to keep their transplanted organs permanently. The average life of a transplanted kidney is 15 years, although some continue to function beyond 30 years.

Source: Newswise

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