

3.3.1 and 4.2 An Overview of Living Kidney Transplantation

Un resumen de trasplante de riñón en vida

El proceso de donación en vida ocurre cuando una persona viva decide donar un riñón a alguien que necesita un trasplante. Esto se llama una donación dirigida porque el donante especifica al receptor. Cuando los donantes deciden donar a cualquiera que necesite un trasplante, esto se llama una donación altruista o no-dirigida. Ellos no especifican quién debe recibir su riñón.

Donar un riñón es el tipo de donación de órgano en vida más común y trasplantes de riñón en vida tienen la tasa de éxito más alta de todos los procedimientos de trasplantes. Otros órganos que pueden ser donados vía el proceso de donación en vida incluyen el hígado, el pulmón, el intestino delgado y el páncreas.

Nacer con solamente un riñón no es inusual. Cerca de 1 de cada 750 personas nace con solamente un riñón y su esperanza de vida es la misma que las personas con dos riñones.

¿Quién puede donar un riñón?

Una donación de riñón en vida frecuentemente viene de un miembro de la familia (por ejemplo, padre, hijo, hermano u otro pariente). Un donante puede ser también un esposo, amigo o colega. O puede ser un desconocido. Una relación genética entre donante y receptor, aunque es beneficiosa, no es necesariamente requerida. Esto se debe a mejores fármacos anti-rechazos. Este tipo de trasplante <no-relacionado> se vuelve cada vez más común.

Un candidato del proceso de donación de riñón en vida es alguien que goce de buena salud, esté bien informado y haga libremente la decisión de donar un riñón. Donantes vivos deben tener más de 18 años y menos de 70 años. Deben gozar de buena salud general sin evidencia de presión arterial alta significativa, diabetes, cáncer, enfermedad renal, enfermedad cardíaca o hepatitis.

Los tipos diferentes de trasplante de riñón en vida son:

Emparentados

Donantes vivos relacionados son consanguíneos sanos del candidato de trasplante. Ellos pueden ser:

- Padres

- Hermanos
- Hijos de más de 18 años
- Otros consanguíneos (tías, tíos, primos, hermanastros, hermanastras o sobrinos)

Sin relación familiar

Donantes vivos no relacionados son individuos sanos que son íntimos emocionalmente, pero no son consanguíneos con el candidato de trasplante. Ellos pueden ser:

- Esposos
- Familia política
- Amigos íntimos
- Colegas, vecinos u otros conocidos

No-dirigido (Altruista)

Donantes no-dirigidos son donantes vivos sin relación ninguna con el receptor y que hacen su donación solamente por motivo abnegado. Este tipo de donación también se llama una donación anónima, altruista, desconocido altruista o donación en vida entre desconocido y desconocido.

Los individuos que tengan interés en ser donante no-dirigido deben ponerse en contacto con centros de trasplantes en su área para discutir la posibilidad de ser donante.

Los programas de intercambios de donantes de riñón

Intercambios de donantes de riñón se vuelven cada vez más comunes y una opción muy emocionante para parejas de donante y receptor de riñón que no sean compatibles con ellos mismos. Anteriormente, personas con insuficiencia renal que tuvieron un donante incompatible no podían beneficiar del trasplante ofrecido a ellos. Sin embargo, los programas de intercambios de donantes de riñón tienen un impacto significativo en las opciones cada vez más extensivas de trasplantes de riñón en vida. Ahora los intercambios de donantes permiten que los trasplantes entre parejas de donantes incompatibles se realicen.

¿Cómo funciona un intercambio de donantes de riñón?

Un intercambio de donantes de riñón consiste en dos o más parejas de donantes/receptores que no son compatibles entre ellos mismos. Los intercambios de donantes de riñones son un gran logro en el campo de donaciones en vida y revolucionan trasplantes de donante vivo porque eliminan la incompatibilidad como una barrera de donación y proveen una manera para que los receptores y sus donantes incompatibles se emparejen con otros receptores y donantes incompatibles.

La lista de espera para un intercambio de donantes de riñón

Si no se puede encontrar un intercambio de donantes de riñón, hay donantes vivos en otras partes del país que pueden ser elegibles y formar parte de una lista de espera para un intercambio de donante de riñón. En este tipo de intercambio, un donante de riñón no compatible con su recipiente previsto ofrece donar a un desconocido en la lista de espera. En cambio, el recipiente previsto avanza su nombre en la lista de espera para un riñón de donante fallecido. Este tipo de donación en vivo también se llama intercambio de la lista de espera o intercambio entre donante vivo y donante fallecido. Pero como se han aumentado tanto los diferentes intercambios de donantes de riñón, los intercambios de las listas de espera ya no son tan comunes.

An Overview of Living Kidney Transplantation

Living donation occurs when a living person decides to donate one of their kidneys to someone in need of a transplant. This is referred to as a directed donation since the donor specifies the recipient. When donors decide to donate to anyone who needs a kidney transplant, this is commonly referred to as an altruistic or non-directed donation. They do not specify who should receive their kidney.

Donating a kidney is the most frequent type of living organ donation and living kidney transplants have the highest success rate of all transplant procedures. Other organs which can be donated via living donation include liver, lung, small bowel and pancreas.

Being born with one kidney is not unusual. About 1 in every 750 people is born with just one kidney and the life expectancy is the same as those with two kidneys.

Who Can Donate a Kidney?

A living kidney donation often comes from a family member (i.e. a parent, child, sibling or other relative). A donor can also be a spouse, friend or co-worker. Or it can be a stranger. A genetic link between donor and recipient, although beneficial, is not necessarily required. This is largely due to improved anti-rejection medications. These type of “non related” transplants are becoming more common.

A good living donor candidate is someone who is healthy, well-informed and makes a voluntary decision to donate one of their kidneys. Living donors must be over 18 and usually under 70 years of age. They must be in good general health with no evidence of significant high blood pressure, diabetes, cancer, kidney disease, heart disease or hepatitis.

Several tests are necessary to determine if the donor’s kidney will be compatible for the intended recipient.

The Different Types of Living Kidney Transplants are:

Related

Related living donors are healthy blood relatives of transplant candidates. They can be:

- parents
- siblings
- children over 18 years of age
- other blood relatives (aunts, uncles, cousins, half brothers and sisters, nieces and nephews)

Non-Related

Unrelated living donors are healthy individuals emotionally close but not related by blood to transplant candidates. They can be:

- spouses
- in-law relatives
- close friends
- co-workers, neighbors or other acquaintances

Non-Directed (Altruistic)

Non-directed donors are living donors who are not related to or known by the recipient and make their donation purely out of selfless motives. This type of donation is also referred to as anonymous, altruistic, altruistic stranger, or stranger-to-stranger living donation.

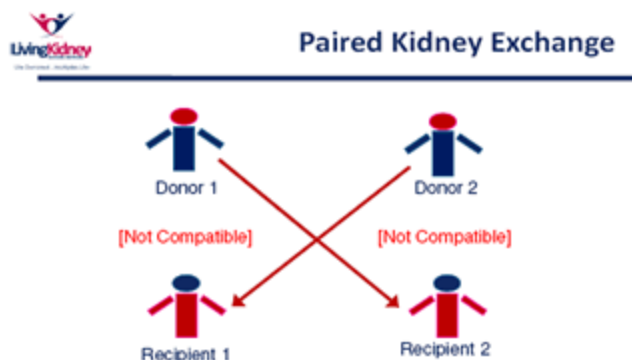
Individuals who are interested in becoming non-directed donors should contact transplant centers in their area to discuss the possibility of becoming a donor.

Paired Kidney Exchange Programs

Kidney paired exchanges are becoming very common and an exciting option for kidney recipient and donor pairs who are not compatible with each other. Previously, people with kidney failure who had an incompatible donor were not able to benefit from the transplant being offered to them. However, kidney paired exchange programs are having a significant impact on the expanding options of living kidney transplants. Paired exchanges are now allowing transplants to occur between incompatible donor pairs and in a few unique ways.

How Does a Paired Kidney Exchange Work?

A kidney paired exchange consists of two or more donor/recipient pairs who are not compatible with each other. Kidney paired exchanges are a major breakthrough in living donations and are revolutionizing living donor transplants by eliminating incompatibility as a barrier to donation and providing a way for recipients and their incompatible donor to be paired with another incompatible recipient and donor.

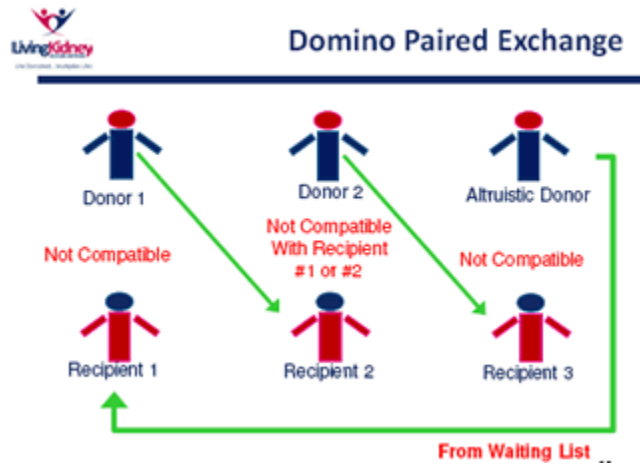


In Pair 1, Donor 1 is not compatible with Recipient 1. In Pair 2, Donor 2 is not compatible with Recipient 2. However, Donor 1 is compatible with Recipient 2 and Donor 2 is compatible with Recipient 1. If you, your donor and the other pair are willing to participate in this “exchange,” a comprehensive evaluation process begins. The medical team will complete final medical tests and schedule the transplant on a date that works with everyone. Both transplants usually occur at the same day. This example used 2 pairs, but in fact any number of pairs is possible.

Domino Kidney Paired Exchange

A domino kidney paired exchange starts with a non-directed or altruistic donor. Instead of just one person benefiting from their donation, this donor can allow many incompatible pairs to be transplanted. The difference

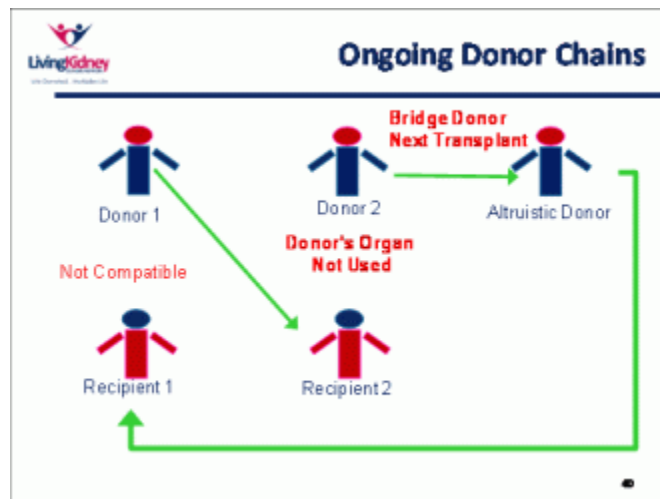
in the example shown below from the “Kidney Paired Exchange” is that Donor #2 is not compatible with either recipient #1 or #2. As such, the altruistic donor allows the other pairs to be exchanged, and have the domino effect.



Ongoing Donor Chains (Also called Never Ending Donor Chains)

Most recently, altruistic or non-directed donors have begun initiating donor chains which have the potential to facilitate thousands of additional living donor transplants.

In the example below, donor, #2 does not donate in this exchange. Donor #2 is referred to as the “bridge donor” for the next “chain”. Donor #2 functions in the same role as the altruistic donor in this example. This chain could continue, over and over again with a new bridge donor. This example uses 2 pairs and the altruistic donor, but any number of pairs could be transplanted.



Compatible Paired Exchanges

Compatible donor/recipient pairs are being used to facilitate transplants with incompatible donor/recipient pairs. This benefits the compatible donor/recipient pair if the recipient receives a better HLA matched kidney, a kidney from a younger donor, or kidney that is a better size. The goal is to have all recipients benefit by participating in such an exchange. An ideal compatible donor/recipient pair is one where the donor is a blood type "O", and the potential recipient is blood type "A", "B", or "AB".

Kidney Paired Exchange Programs

Many hospitals have their own kidney paired exchanges that they arrange within the incompatible pairs at their hospitals. The nature of kidney paired exchanges is that the likelihood of finding a compatible pair is increased when there are many incompatible pairs. There are organizations that "co-op" with other hospitals to increase the likelihood of being "matched" with another incompatible pair. The following organizations have agreements with many hospitals in order to increase that likelihood.

National Kidney Registry www.kidneyregistry.org Contact: Diane Zocchia (631) 560-6836

The Alliance for Paired Donation www.paireddonation.org Contact: Laurie Reece 512-961-6199

The New England Paired Exchange Program www.nepke.org Contact: Ruthanne (800) 446-6362