Sharing Life
A guide to living donor kidney transplantation
Welcome to Transplant Experience

The journey of transplantation is a personal experience shared by many. As you navigate through your journey, you can access a variety of educational resources available at Transplant Experience. No matter where you are on your journey, the Transplant Experience community will welcome you, help transform you, and help you grow—as a person, not just a patient.

A Kidney Transplant Is an Incredible Opportunity

Kidney donation is an amazing gift cherished by every recipient in the transplant community. Before transplantation, dialysis can be time-consuming and exhausting. A new kidney is a chance to have more freedom for the important things in life.

When someone chooses to give a kidney, they affect an individual’s life. With living donation, an individual’s remarkable generosity offers an alternative to the long, uncertain wait for an organ.

This guide provides valuable information on living kidney donation so recipients and donors can be prepared for the journey ahead. It is one of the many resources available at TransplantExperience.com.

The health information contained in this brochure is provided for educational purposes only and should not replace discussions with a healthcare professional.
Understanding Kidney Transplantation

Types of donors
Transplanted kidneys are made available through either living or deceased donors.1

Deceased donor: A person who passed away who had opted (or whose family had opted) to make organ donation a part of his or her final wishes. Kidneys made available this way are given to individuals on the organ transplant waiting list.

Living donor: A person who decides to give a kidney to another person through living donation.

The waiting list
The United Network for Organ Sharing (UNOS) is a private, nonprofit organization that manages the national transplant waiting list. When a kidney becomes available, a person on the list is chosen as the recipient according to many factors, including donor and recipient compatibility and length of time on the waiting list.2

Currently, there are approximately 100,000 people on the national kidney transplant waiting list.3

The shortage of available organs means there is an urgent need for donors.

Transplantation or dialysis
People with end-stage renal disease, or kidney failure, have 2 options: remain on dialysis therapy or receive a transplant. Transplantation is considered a more feasible treatment decision. Not only do transplant recipients live longer than patients who stay on dialysis, but they also have the chance to be free from the daily challenges of dialysis. After surgery, many transplant recipients are able to resume their normal everyday activities.4

Compatibility
Before transplantation, a number of medical tests will be performed to ensure that the donated kidney will be accepted by the recipient’s body. Successful transplantation requires compatibility between the donor and the recipient. If the donor and recipient have different blood types, or if the recipient’s immune system is not compatible with the donor’s organ, the risk of organ rejection may be too high to move forward with transplantation. Moreover, the donor will also need to undergo a complete physical exam to ensure that he or she is healthy enough to undergo the operation.5
The Advantages of Living Donation

Living donation increases transplant success rates
Waiting for a kidney through the national transplant waiting list may be the only option for some people. For others, living donation is a viable option. According to the Organ Procurement and Transplantation Network and the Scientific Registry of Transplant Recipients, transplant success rates are higher when a kidney is given by a living donor.6

Many factors contribute to greater success

**Stronger match:** Because living kidney donors and their recipients are sometimes family members, there is a better chance for compatibility and less of a chance for organ rejection.5

**More preparation:** With living donation, transplant surgery can be scheduled in advance, allowing time to plan for absence from work or childcare.5 This is not the case for patients on the kidney transplant waiting list.

**Better results:** With living kidney donation, recipient and donor surgeries can be performed simultaneously.7 Because the kidney is typically without blood supply for a shorter period of time, kidneys from living donors usually begin to function immediately after surgery.5

Every year, thousands of people are receiving kidneys from living donors.8
Possible Living Donors

Family or friends
Siblings, half-siblings, children, aunts, uncles, nieces, and nephews are examples of close relatives who can be highly compatible matches for the recipient. However, friends or other nonrelated loved ones may also be donors.

Good Samaritan
Living donors can also be benevolent, compassionate individuals who donate to unknown recipients. Some transplant centers have Good Samaritan programs. Talk to your doctor and transplant team to see if this is an option at your local transplant center.

In 2013, nearly 5000 kidney transplants were made possible through living donation.

Paired exchange donation
Sometimes, a transplant candidate will have a friend or family member who is a willing donor, but whose kidney is not compatible. Paired exchange donation helps solve this incompatibility by finding 2 other individuals with a similar problem. The first donor (Donor A) will donate his or her kidney to the other recipient (Recipient B). The second donor (Donor B) will in turn donate a kidney to the original transplant candidate (Recipient A). Many transplant centers offer these paired exchange, or “kidney swap,” programs.
Becoming a Donor

The mutual decision
Transplantation is a journey not only for the recipient, but also for the donor. Before kidney donation, both the donor and the recipient should feel comfortable moving forward with the decision.

Initial exam
Once the decision has been made, any interested donor should meet with the recipient's doctor and transplant team to ask any questions and begin the screening process. The first test will likely be a blood-type test that determines whether or not the recipient and donor have compatible blood types.

Additional exams
If blood-type compatibility is confirmed, the potential donor will need to undergo a complete physical exam to ensure he or she can have surgery. The transplant center may conduct some other tests, including:

- Supplementary blood-type tests to determine the quality of the match
- Urine tests that show if the donor kidney is healthy
- Special x-rays (either a renal arteriogram or a spiral CT scan) to determine the anatomy of the kidney
- An electrocardiogram (EKG) to help assess heart function
- Psychological and/or psychiatric examination that ensure both the donor and recipient are mentally and emotionally prepared for transplantation

Once the transplant center receives the results of each test, the doctor and transplant team will decide whether or not to proceed with the donation. If the results show that the donor is compatible with the recipient and healthy for surgery, surgery can be scheduled.

Matching Blood Types

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Understanding the Donation Procedure

About the donor’s surgery
In living donation, the donor’s and recipient’s surgeries can be conducted simultaneously.7

Laparoscopic surgery
Today, most living donors have their kidneys removed with a less invasive procedure12 that takes approximately 3 to 4 hours.13

• Before surgery, the donor is placed under general anesthesia.
• The surgeon inserts a small camera, called a laparoscope, into the abdomen through a small incision.12
• The surgeon makes another incision in the abdomen (approximately 3 inches) to remove the kidney.12

Conventional surgery
Many donors are eligible for laparoscopic surgery. However, if the donor has had multiple previous abdominal surgeries, is overweight, or has an abnormally shaped kidney, he or she may need to undergo conventional surgery that is more invasive.12

• Before surgery, the donor is placed under general anesthesia.
• The surgeon makes a larger incision (approximately 6 to 10 inches) and cuts through the muscle to access the kidney.12
• The kidney is removed through this same incision.

Be aware of the risks of surgery
Donating an organ is a significant medical procedure that comes with the risks of any major surgery, including potential complications associated with general anesthesia.14 However, ongoing medical advancements have helped improve the surgical procedure for kidney donors.12

After surgery
Because laparoscopic surgery is less invasive, it allows a shorter hospital stay, a shorter recovery, and less visible scarring than conventional surgery.12 After laparoscopic surgery, the donor is usually able to return home within a couple of days.

Conventional surgery is often more painful than the laparoscopic option, and therefore, a longer hospital stay may be needed (3 to 5 days).12 Both laparoscopic and conventional procedures have their advantages, so both options should be discussed with the donor’s surgeon.

Ongoing medical advancements have helped improve the surgical procedure for kidney donors.12
Life After Donation

Recovery
After surgery, the donor should expect some pain and discomfort. As with any surgical procedure, development of infection or bleeding may be possible, along with other complications.\textsuperscript{13}

Psychological impact
Donating an organ may also have psychological effects. Sometimes, the donor feels obligated to donate. If the organ is rejected, the donor may feel responsible. Therefore, counseling and therapy before and after surgery is crucial.\textsuperscript{5}

Lifestyle changes
Since the beginning of living donor kidney transplantation in 1954,\textsuperscript{15} medical advancements have helped improve the surgical procedure and outcome for kidney donors.\textsuperscript{12} A study showed that kidney donors had similar kidney function and health status to the general population.\textsuperscript{16}

However, possible long-term risks of kidney donation may include high blood pressure and reduced kidney function.\textsuperscript{17} After donation you will need to schedule regular appointments with your doctor.

Thousands of people choose to become living kidney donors each year.\textsuperscript{8}
Understanding the Recipient Procedure

About the recipient’s surgery

The recipient surgery usually takes about 3 to 4 hours and involves the following steps:

- The recipient is placed under general anesthesia prior to surgery.
- Once the recipient is asleep, an incision is made in the lower abdomen.
- The surgical team places the donor kidney into the abdomen and connects the kidney to the recipient’s blood supply.
- Once all of the attachments have been made, the surgeon closes the incision.

After surgery

Once the procedure is completed, the recipient will stay in the hospital until their physician determines they are ready to return home. It is important to discuss with your doctor what to expect after transplant surgery.

Helping ensure transplant success

After surgery, the recipient’s immune system often thinks that the transplanted organ is a foreign infection and tries to get rid of it. This natural response is known as organ rejection. Immediately after surgery, the recipient is given medications (called immunosuppressants) to help prevent the rejection of the donated organ in the recipient’s body. Taking immunosuppressants and all other medications exactly as instructed is essential to help prevent organ rejection and infection. Doing so will help contribute to a successful transplant.

Live healthy! Find more information about posttransplant diet and lifestyle at TransplantExperience.com
Discussing Living Donation

Talking with family and friends

Often, family members and friends willingly volunteer to donate a kidney to a loved one in need. However, there may be times when a recipient needs to ask for help. If this is the case, the following tips may help support your discussion.

- Let all of your family members and close friends know that you are in need of a kidney transplant.
- Help them understand the advantages of living donor kidney transplantation.
- When approaching your friend or family member, take his or her personality into consideration.
- Let your potential donor know that he or she is not obligated to donate and that the decision will not negatively impact your relationship.
- Give your potential donor time to make an informed decision.
- Don’t force the potential donor to say yes. If he or she does not feel comfortable, then don’t continue to ask.

When considering talking to someone about living donation, it is important to offer education. Share the information provided in this brochure and have your transplant team speak with the potential donor. Explain how donation and transplantation can make a difference in both of your lives. Make sure that your potential donor understands the risks and benefits of living donation surgery so he or she is comfortable with the decision.

Talking about financing a kidney transplant

Donor

The donor’s surgery is typically covered by the recipient’s Medicare or private health insurance (if the donation is to a family member or friend).5

Recipient

Many private insurance plans or Medicare will cover the costs of the transplant procedure and posttransplant medication.20 However, insurance coverage varies for recipients. It is critical to begin looking at all financing opportunities as soon as possible. The majority of transplant centers have financial coordinators and social workers who can help you understand your financial options.

Share your news! Let your family, friends, and loved ones know about your experience.
Join the Transplant Experience Community Today

Additional resources on kidney transplantation are available at TransplantExperience.com.

References