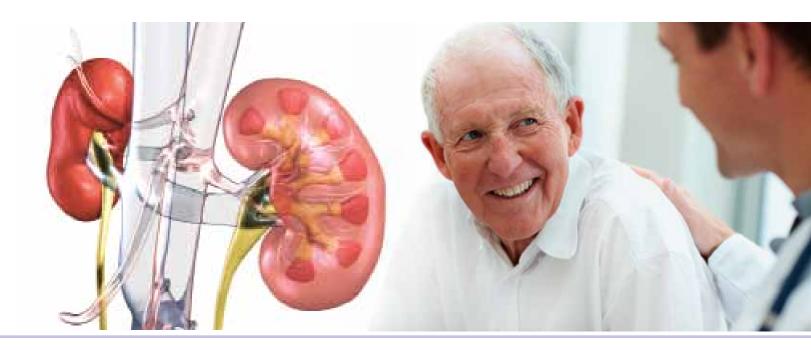


# Kidney Transplant

Guide for recipients and donors



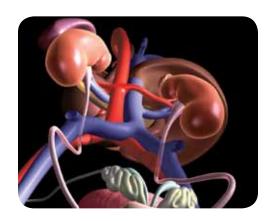
In 1963, Cleveland Clinic performed the first kidney transplant in Northeast Ohio and became a recognized pioneer in the field of organ transplantation. Since then, we have performed more than 3,500 kidney transplants, and as a result, we have acquired vast experience in the surgical techniques of successful kidney transplantation. In addition, we provide our transplant patients with world-class medical and nursing care, along with emotional support, through the entire transplant process.

Kidney transplantation is one option in an overall strategy for treating patients with end-stage renal disease. Deciding to undergo transplantation is a decision between you, your family and your physician, and it requires careful thought about each option. As part of your decision-making process, we encourage you to evaluate the kidney transplantation program at Cleveland Clinic.

Since 2000, Cleveland Clinic's urology program has been ranked among the top 2 programs in the United States by *U.S.News* & *World Report*. Our kidney disease program has been ranked among the top 3 in the nation.

If you have questions or would like more information about Cleveland Clinic's Kidney Transplant Program, please call us at 216.444.6996. For current statistics on kidney transplant at Cleveland Clinic, please visit clevelandclinic.org/transplant.





#### **TABLE OF CONTENTS**

About Kidney Transplants, 2

Living Donor Transplants, 3

Laparoscopic Procedures, 4

'Single Port' Surgery, 4

Deceased-Donor Kidneys, 5

Allogen Labs, 5

Transplant Team, 6

Pediatric Patients, 6

Contact Information, 7

### **About Kidney Transplants**

The rewards of a successful kidney transplant are many. Most people report increased strength, stamina and energy. They can return to a more normal lifestyle without being dependent on dialysis.

Kidney transplantation means placing a healthy kidney into the body where it can perform all the functions that a failing kidney cannot. In most cases, the diseased kidneys, located in the abdomen near the lower back, are not removed. The new kidney is positioned in the pelvic area where it is surgically connected to nearby blood vessels (see illustration).

Years of experience, research and improved medications that prevent organ rejection have made kidney transplants extremely successful, and the number of successful transplants continues to grow. If a kidney transplant is not successful, the recipient can return to a regular dialysis schedule or, possibly, undergo another transplant.

Making the decision that transplantation is the best or only option to treat your condition is a crucial phase of transplant evaluation. Many complications of advanced diseases can be managed with medical or surgical treatment other than transplantation. Alternatives to transplantation exist, and you and your physician should discuss them.

#### **KIDNEY DONATIONS**

Kidneys for transplantation come from living donors or deceased donors. A living donor transplant is a procedure in which a kidney is surgically removed from a healthy person and placed in a person with kidney failure. Deceased-donor kidneys are obtained from people who have expressed their desire to be organ donors and whose family has consented. All donors are screened carefully to prevent any transmissible disease. Currently, nearly 40 percent of kidneys come from living donors, and 40 percent of those donations are from donors not related to the recipients.

Some people may worry about the consequences of donating a kidney. However, a healthy person can donate a kidney safely without negatively affecting his or her own kidney function, general health, lifestyle or life span. People can function as well with one healthy kidney as with two. For more information on becoming a kidney donor, please call 216.445.3150.



### Living Donor Transplants

Siblings generally make the best living donors. However, with advancements in drugs and treatment to prevent rejection, anyone can be considered for organ donation if he or she has a compatible blood type and a favorable tissue-typing crossmatch. Most healthy people between the ages of 18 and 60 are potential candidates for organ donation.

Cleveland Clinic encourages the use of living donor transplants whenever possible because of their high success rate. Of patients who received kidney transplants from living donors at Cleveland Clinic during the past several years, on average, 96 percent had transplanted kidneys that were still functioning one year later. Of those who received deceased-donor kidneys, 89 percent had transplanted kidneys that were still functioning one year later.

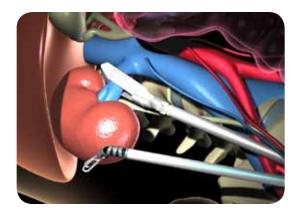
Additional advantages of having a living donor transplant are that the transplant can be scheduled in advance and the amount of time spent on a waiting list can be shortened if a person has a compatible living donor. A patient awaiting a deceased-donor transplant has little warning of when a kidney will become available and can remain "on call" anywhere from a few weeks to several months or even several years. (The average wait time for a deceased-donor kidney is two to five years.)

#### REMOVING A KIDNEY FROM A LIVING DONOR

Until recently, kidney donation from a living donor could only be accomplished through a surgical procedure called open nephrectomy, which requires a large, muscle-cutting abdominal incision, removal of a rib, and a relatively longer hospital stay and recovery period.

However, an advanced surgical procedure called laparoscopic donor nephrectomy has significant benefits over the traditional open surgery for kidney donation. Because the incisions are small, laparoscopic donor nephrectomy translates into reduced postoperative pain and shorter hospital stays, and patients experience a quicker return to normal eating habits and daily activities. Donor patients experience significantly less discomfort, have a shorter recovery period and return to work quicker than donors who had traditional open surgery.

95 percent of living kidney donors at Cleveland Clinic undergo laparoscopic nephrectomy.



#### WHAT IS A LAPAROSCOPIC PROCEDURE?

Laparoscopy is a minimally invasive surgical procedure in which a special camera, called a laparoscope, is used to produce an inside view of the abdominal cavity. Surgeons use the laparoscope, which transmits a real-life picture of the internal organs to a video monitor, to guide them through surgical procedures. The laparoscope magnifies these images many times their actual size, providing surgeons with a superior view of the abdomen.

Laparoscopic nephrectomy is a minimally invasive procedure that uses a laparoscope to remove a kidney for donation. Laparoscopic kidney removal is considered minimally invasive because it requires only three or four small non-muscle-cutting incisions rather than one large muscle-cutting incision in the abdomen.



#### 'SINGLE-PORT' SURGERY

Live donor nephrectomies also can be done through a newer procedure called single-port laparoscopic surgery. This surgery is literally performed through a single port, or incision, in a patient's navel (belly button). Cleveland Clinic urologic surgeons were among the first in the country to perform these procedures, which minimize scarring and may reduce complications that commonly occur after traditional open and even traditional laparoscopic abdominal surgery.

Cleveland Clinic urologic surgeons are among the most experienced in performing single-port surgeries, having performed more than 160 of these procedures as of mid-2010.

#### **DONOR WELLNESS INITIATIVE**

The Cleveland Clinic Transplant Center offers a unique program of wellness assessment and maintenance designed to ensure the continued good health of our kidney donor patients. Called the Donor Wellness Initiative, or Donor WIn, the program consists of a detailed physical examination, sophisticated measurement of cardiovascular health, dietary and fitness evaluations, and evaluation of kidney function.

Donors who participate in the program are given the results of their assessments and counseled regarding any issues of concern.

#### PAIRED DONATION NETWORK

Cleveland Clinic is active in the Paired Donation Network, an innovative service for incompatible donor-recipient pairs. If you have a living donor who is not a match for you, you might elect to become part of the Paired Donation Network. This program allows the living donor to give his or her kidney to another recipient, and you would receive a kidney from that recipient's donor.



### **Deceased-Donor Kidneys**

Transplant candidates who do not have a living donor whose kidney is a suitable match can receive a deceased-donor kidney transplant. Candidates' names are placed on a national computerized waiting list, and every effort is made to find a compatible donor kidney as soon as possible.

To help locate and transport donor kidneys from anywhere in the country, Cleveland Clinic coordinates transplant activities with LifeBanc, the Northeast Ohio organ procurement agency. LifeBanc is part of a nationwide computer system that matches donor organs with recipients.

# ALLOGEN LABORATORIES: CLEVELAND CLINIC'S TISSUE-TYPING SPECIALISTS

Determining in advance whether a donated kidney is likely to be tolerated by a recipient's body is crucial to the success of a transplant. The recipient's and donor's blood type and tissue type must be compatible. The recipient's blood also is tested for antibodies, substances the body produces to destroy foreign materials, because the body may recognize the transplanted kidney as a foreign material. Patients on a waiting list for a kidney will supply tubes of blood each month to monitor these antibodies and test compatibility with potential donors. Blood test results are entered into a computer at the United Network for Organ Sharing (UNOS) so that when a deceased-donor kidney becomes available, the UNOS computer can evaluate its suitability. For more information on UNOS and the evaluation/waiting process, visit unos.org.

Tissue typing tests for Cleveland Clinic patients are performed at Allogen Laboratories. The lab's highly trained technologists are on call 24 hours a day, seven days a week, to perform the necessary tests whenever a kidney becomes available. They perform more than 2,000 tests each month.

Allogen Laboratories was one of the first tissue-typing labs in the country when it was founded in 1968, and it remains one of the largest labs in the country today. The lab meets stringent standards and is fully accredited by UNOS, the American Society for Histocompatibility and Immunogenetics, and several other quality-regulating organizations.

# ARE YOU AN ORGAN DONOR? SPREAD THE WORD!

Did you know that in order for your organs, tissue or corneas to be donated, your family must give consent even if you have a donor card or a legal document announcing your wishes?

Talking about donation doesn't mean talking about death. Talking about donation means talking about the opportunity to give another person a second chance at life — about giving that final gift that will impact another person and his or her family forever.

Because family consent is required, physicians and nurses must ask the next of kin about organ donation during a very emotional and difficult time. If you haven't discussed with your family how you feel about donation, they may not know what to do. Knowing that their loss has given hope and help to others in need can provide lasting consolation to your family.



# ACCOMMODATIONS FOR FAMILIES

An important part of the recovery process from any surgery is to have support from loved ones nearby. There are ample accommodations for visitors in the Cleveland Clinic area. For more information on nearby accommodations, please call our Transplant Hospitality Unit at 216.444.8511 or visit clevelandclinic.org and click on Patients & Visitors.

For your convenience, there is a Ronald McDonald House adjacent to Cleveland Clinic. For more information, call 216.229.5758.

# Cleveland Clinic's Transplant Team

Throughout the entire transplantation process, the Cleveland Clinic transplant team ensures that you receive the best possible care. Team members are there each step of the way to guide you, outline what you can expect and answer any questions you may have. Below is a list of team members and their role in the transplant process.

**Board-certified nephrologists** are kidney disease specialists who have training and experience in caring for kidney transplant patients and who monitor the medical care of transplant patients.

**Transplant coordinators** are registered nurses who serve as the transplant patient's contact throughout the transplant process. They also educate patients and family members about new medications and life after transplantation.

**Board-certified urologic surgeons** have specialty training and experience in kidney transplantation and perform the surgeries.

**Living kidney donor advocates** explain the entire donation and transplantation process and answers questions for living kidney donors.

**Social workers** are available throughout the transplant process to help identify and evaluate a patient's social issues and needs. They can provide services including education, counseling regarding lifestyle changes and referrals to community agencies.

**Financial coordinators** can answer any questions regarding insurance coverage and Medicare benefits related to surgery and care.

Transplant team members are available after patients have returned home to provide additional information and answer questions. The team also can help with follow-up care, including routine blood testing, medication evaluation and adaptation, and visits to ensure that patients are doing well.

#### **SPECIAL CARE FOR PEDIATRIC PATIENTS**

Cleveland Clinic's pediatric transplant program began in 1963 with the goal of providing the most normal life possible for young patients. Pediatric and adolescent patients receiving a kidney transplant are admitted to Cleveland Clinic Children's Hospital. The Children's Hospital provides state-of-the-art care in a homelike setting. In addition, because the family is recognized as an important part of a hospitalized child's recovery, our hospital rooms are designed to enable a parent to spend the night in the room with his or her child.

For more information on Cleveland Clinic's pediatric transplant program, please call 216.444.6123.



## Cleveland Clinic: Pioneer in Kidney Care for More Than 50 Years

Cleveland Clinic's commitment to innovation in caring for patients with kidney failure dates back to the 1950s, with the development and refinement of dialysis techniques to enable the survival of patients with kidney failure.

Cleveland Clinic strives to continue its tradition of making significant contributions in the prevention and treatment of kidney disease. Other milestones include:

- · developing one of the first deceased-donor kidney transplant programs in the world in 1963
- · performing the first kidney transplant in Ohio
- pioneering extracorporeal renal, or bench, surgery (in which the kidney is removed from the body, repaired and reimplanted) to repair complex kidney disorders
- pioneering laparoscopic minimally invasive procedures to treat kidney diseases

#### **IMPORTANT TELEPHONE NUMBERS**

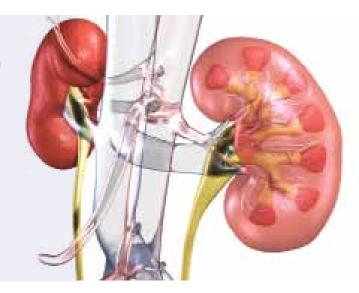
For more information about the Cleveland Clinic kidney transplant program or to schedule an appointment, please call:

**Kidney Donor Office:** 216.445.3150 Pre-Kidney Transplant: 216.444.6996 Post-Kidney Transplant: 216.444.8949

Pediatric Kidney Transplant: 216.444.6123

The Cleveland Clinic Glickman Urological & Kidney Institute also offers transplant services at St. Vincent Indianapolis Hospital in Indiana and

Charleston Area Medical Center in Charleston, W.Va.





9500 Euclid Avenue, Cleveland, OH 44195

Cleveland Clinic is a nonprofit, multispecialty academic medical center. Founded in 1921, it is dedicated to providing quality specialized care and includes an outpatient clinic, a hospital with more than 1,300 staffed beds, an education institute and a research institute.

© The Cleveland Clinic Foundation 2010