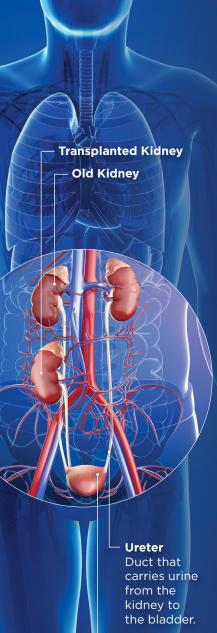
Getting a New Kidney

Facts about Kidney Transplant





Kidney Transplant Overview

1. Removing the donor kidney

Most people have two kidneys. Since a person can live with just one kidney, for people who have received a kidney transplant one of these organs may have been donated by a living donor. Both the kidney and its attached vessels are removed from the donor for the transplant.

2. Beginning the transplant procedure

Kidney transplant surgery usually takes place while the recipient is asleep under general anesthesia. The surgeon makes an incision in the lower abdomen on one side and places the donor kidney into the abdomen through this incision.

3. Placing the kidney into the recipient

In most cases, the donor kidney is placed into the abdomen below the original kidney, which may be left in place.

4. Completing the transplant

The surgeon connects the blood flow to and from the transplanted kidney. He or she will also connect the ureter of the transplanted kidney to the bladder. This connection allows urine to flow into the bladder and pass out of the body.



GETTING A NEW KIDNEY Facts About Kidney Transplants

When you have a kidney transplant, there is much to do before and after the operation. Before the operation, you will work with the transplant team to complete an evaluation. After the operation, you will need to see your transplant team to make sure your kidney keeps working well and you stay in good health. How long a new kidney lasts depends on many factors. Some of these factors you can control. Some you cannot control.

You and the transplant team will work together to keep you and your kidney healthy.

What is Kidney Failure and What Causes it?

Kidney failure happens when your kidneys are not working the way they should. Many different diseases can harm your kidneys and cause poor function. Some of these diseases can cause harm in just a few days or weeks. Other diseases can take years to cause harm. If your kidneys fail, both usually fail at the same time.

Bladder

Hollow muscular organ that stores urine.

What are Signs of Kidney Failure?

When you start to have kidney problems, you may feel fine at first. As your kidneys get worse, however, you may begin to:

Tire easily

- Feel itchy
- Have trouble sleeping
- Be short of breath
- Feel sick to your stomach

How is Kidney Failure Treated?

When your kidneys fail, you will need to have one or both of the following treatments:

Dialysis: (dy-al-i-sis) is a technique that removes waste products, because your kidney can no longer do it. With dialysis, either a machine or a flexible tube, called a catheter, does the work that your kidney used to do. There are two forms of dialysis:

- Hemodialysis (hee-mo-dy-al-i-sis): Dialysis using a machine
- Peritoneal dialysis (pare-i-to-nee-al): Uses a tube (catheter)

Kidney Transplant: A kidney transplant is when a new kidney is put into the lower part of the abdomen in front of the hip bone. Together, you and your doctors will decide which treatment is best for you. It depends on your medical history, health status, and personal situation. Some patients have a kidney transplant after starting dialysis. Others get a kidney transplant without ever having dialysis.

What Happens When You Get a Kidney Transplant?

There are four steps to getting a kidney transplant. Your transplant team will:

- 1. Decide if you are healthy enough to receive a new kidney.
- 2. Prepare you for your operation. This can take a long time, and there is no guarantee a kidney will be found.
- 3. Perform a kidney transplant operation.
- 4. Help you stay healthy after the operation.

Before you can have a kidney transplant, a team of healthcare professionals will talk with you about what may happen if you get a new kidney. This can depend on your physical health, your mental health, and how easy it will be for you to get the transplant medicines you will need. The four steps to this phase of your evaluation and treatment are described on the following pages.



STEP 1 - Visiting the Transplant Center

You, your doctor, a nurse, or a social worker can refer you to the transplant program for an evaluation. You will be scheduled for orientation, which will explain the transplant process. At this visit, you will meet with an insurance specialist who will review your policy to make sure it covers the medicines you will need after your transplant. You will be assigned a coordinator that will work with you throughout this process. We will request your medical records. Your records should show that you are taking your medicine properly and are on a restricted diet. They will also confirm that you have no medical conditions that can keep you from receiving a transplant.

Additional visits will be scheduled by the transplant team to evaluate your physical health. It is important that you attend all of your appointments and take all medical tests as instructed by your transplant team. You may need to have tests to evaluate your:

- Heart and lungs
- Bladder
- Breasts and cervix, if you are a woman
- Prostate, if you are a man
- Teeth and gums
- Intestines
- Non-functioning kidneys and gallbladder

The transplant team may order other tests and your mental health will be evaluated. You may need to see a social worker or psychologist to make sure you are not addicted to alcohol or drugs. It is also important to make sure you have no emotional problems that can interfere with your health.

If the transplant team decides you are a good candidate for the operation, they will work with you to find a new kidney. If you are added to the wait-list, try to arrange in advance for someone to take you to the hospital when the time comes.



STEP 2 - Preparing for Your Operation

This step involves finding a kidney for you. Sometimes this can take a long time. How long it takes depends on the type of kidney transplant. There are two main types of kidney transplants:

Living Donor Transplant: This is when a kidney is donated by a living person. A few key facts to keep in mind for a living donor transplant are:

- Living related or living unrelated kidney donation are the best options.
- They offer the best quality kidney in the shortest possible time.
- The living donor must have a complete evaluation to make sure their health will not be harmed by removing the kidney.
 This evaluation process is different for each transplant center.
- When a person donates a kidney, it does not put them at risk for future health problems.
- Even though someone wants to donate a kidney, they may not be able to because of health, emotional, or social reasons.

Deceased Donor Transplant: Getting a kidney from a living donor is not always possible. In this case, your name would be placed on the national waiting list for a deceased donor kidney. Deceased donor kidneys are from a person who has either suffered from brain death or has a traumatic injury, but are not brain dead. Donors who are not brain dead are classified as DCD (donation after cardiac death). You will have to consent for a DCD kidney.

Kidneys from a deceased donor are a precious national resource. A nationwide system for donating kidneys balances

two things: the needs of patients who have waited a long time for a kidney, and the goal of transplanting a kidney that is well matched with the patient.

In general, the wait for a deceased donor kidney is longer than the wait for a living donor kidney. Either way, there is no guarantee you will receive a kidney.

Every kidney offered for a transplant has a Kidney Donor Profile Index (KDPI) score. This is a percentage score that ranges from zero to 100 percent. The score is associated with how long the kidney is likely to function when compared to other kidneys. A KDPI score of 20 perenct means that the kidney is likely to function longer than 80 percent of other available kidneys. A KDPI score of 60 percent means that the kidney is likely to function longer than 40 percent of other available kidneys. You will have to consent for a KDPI greater than 85%.

During surgery, the transplanted kidney is put in a different place than your diseased kidney. The new kidney will be put in the right or left side of the lower abdomen just above the front of your hip bone. The operation will take three to five hours.

Afterwards, you will be taken to a recovery room. You will stay in the hospital until your doctor feels you are ready to go home. How long you stay will depend on your health and how well the new kidney is working. It will also depend on your ability to take care of your new kidney.

STEP 3 - Your Operation

How long you stay will depend on your health and how well the new kidney is working. It will also depend on your ability to take care of your new kidney. The operation typically takes 3 to 4 hours, but this timing may vary. When you awaken, you may stay in the intensive care unit or recovery room for 1 to 2 days before being moved to a hospital room.

Medications

After your operation, you will take strong medicines to keep your body from rejecting the new kidney. Your immune system protects you from foreign invaders, and your body will think the new kidney is a foreign invader. So your system will try to reject your new kidney. This can damage it. Because of this, you will take immunosuppressants (im-u-no su-pres-ants), also called anti-rejection medicines. These drugs suppress the immune system enough to keep your transplant kidney healthy.



You will get an organ that is a good match for your body, but it will not be a perfect match because it is not your own kidney. This is okay and the reason why you will take immunosuppressive drugs. Your body will know that the kidney once belonged to someone else, so you will need to take these drugs for as long as you have the transplant.

STEP 4 - Staying Healthy After the Operation

It is very important that you keep yourself healthy after your transplant. Here are a few important reminders:

- After you leave the hospital, make sure you go to the transplant center often.
- Be sure you go to all your doctor appointments. This is very important! This may remind you of what it was like going to the dialysis unit, but you will only have to do this for a few months.
- Take your medicines properly. This is extremely important.
- Be sure to tell the staff at the transplant center if you have problems keeping your appointments or taking your medicines.

Your Appointments

If your body begins to reject your new kidney, you may not know it. Some patients may experience the symptoms of rejection, but most do not recognize them. If your body is rejecting the new kidney, your doctors and nurses will know it. This is why it is so important to go to all your medical appointments. Your health care providers watch closely for signs of rejection and side effects from the medications. But, they must examine you and test your blood to know for sure.

Your doctor and transplant staff will watch for these signs:

- Rejection: The risk of rejection never goes away. You will
 always need anti-rejection drugs. Your doctor may lower the
 dosage, but you should never skip or stop taking the drugs.
- Infections: Immunosuppressant drugs can increase the chance of getting infections. These infections can be treated. However, you need to tell the transplant team if you have a fever, unusual pain, or changes in your health. The risk of infection will go down when your doctor lowers the dosage.
- High Blood Pressure: High blood pressure is a common problem after transplant. It can damage your new kidney and cause strokes and heart attacks. If you have high blood pressure, your doctor will put you on medication
- Diabetes Mellitus: Anti-rejection medications can cause diabetes. If you had diabetes before your transplant, you may find it harder to control your blood sugar level after your transplant.
- **High Cholesterol:** Your anti-rejection medication can also cause high cholesterol.
- **Kidney Disease:** Some forms of kidney disease can come back in the transplanted kidney. Your doctor and transplant staff will monitor your blood and urine for signs of this problem.
- Cancer: Patients with kidney failure are at higher risk for certain types of cancer. Anti-rejection drugs can raise the risk of getting cancer.
- Bone Disease: Transplant patients taking steroids are at risk for osteoporosis (os-tee-o-por-osis), which is a condition that causes your bones to thin. Your doctor may order a bone density test and put you on medication to help prevent this condition. Transplant patients on steroids may also get osteonecrosis (os-tee-o-nek-ro-sis), which causes pain in the hips or other joints.
- **Pregnancy:** A woman should not plan to get pregnant for at least one year after her transplant, so it is important that she talk to her doctor about birth control. Some transplant medications can harm an unborn baby. If you want to get pregnant, you and your transplant doctor should talk about it before your transplant. This is because there are things you should consider about pregnancy when you have a transplant. To make sure you, your new kidney, and your baby all do well during and after your pregnancy, it is very important to plan ahead with your doctor and transplant team.



Alan Koffron, MD Surgical Medical Director

MEDICAL SCHOOL

Carver College of Medicine, University of Iowa Iowa City, IA

RESIDENCY

Chicago Medical School University of Health Sciences Chicago, IL

FELLOWSHIPS

Multiple-Organ Transplant Surgery and Hepatobiliary Surgery Northwestern University Medical School Chicago, IL

Pediatric Liver Transplant Surgery and Hepatobiliary Surgery Children's Memorial Hospital Chicago, IL



Kenneth Kokko, MD, PhD

Nephrologist

Program Medical Director

MEDICAL DEGREE

Emory School of Medicine Atlanta, GA

RESIDENCY

Internal Medicine, Emory School of Medicine Atlanta, GA

FELLOWSHIPS

Nephrology, Emory School of Medicine Atlanta, GA

Erlanger Kidney Transplant Center

979 E. 3rd Street, Suite B-1002 | Chattanooga, TN 37403 Phone 423-778-8067 | Fax 423-778-6674

¹ Information compiled from American Society of Transplantation. Please see www.myast.org/ for more information and resources.

1120 Route 73, Suite 200 | Mount Laurel, NJ 08054 Phone 856-439-9986 | Fax 856-439-9982

