



Information for Kidney Donors

You have offered to donate a kidney. That is a very generous gift to give. It is not an easy decision to make and it is not an easy thing to do, but it is one of the greatest gifts: the gift of a more normal life. This pamphlet will give you information about the surgery for kidney donation.

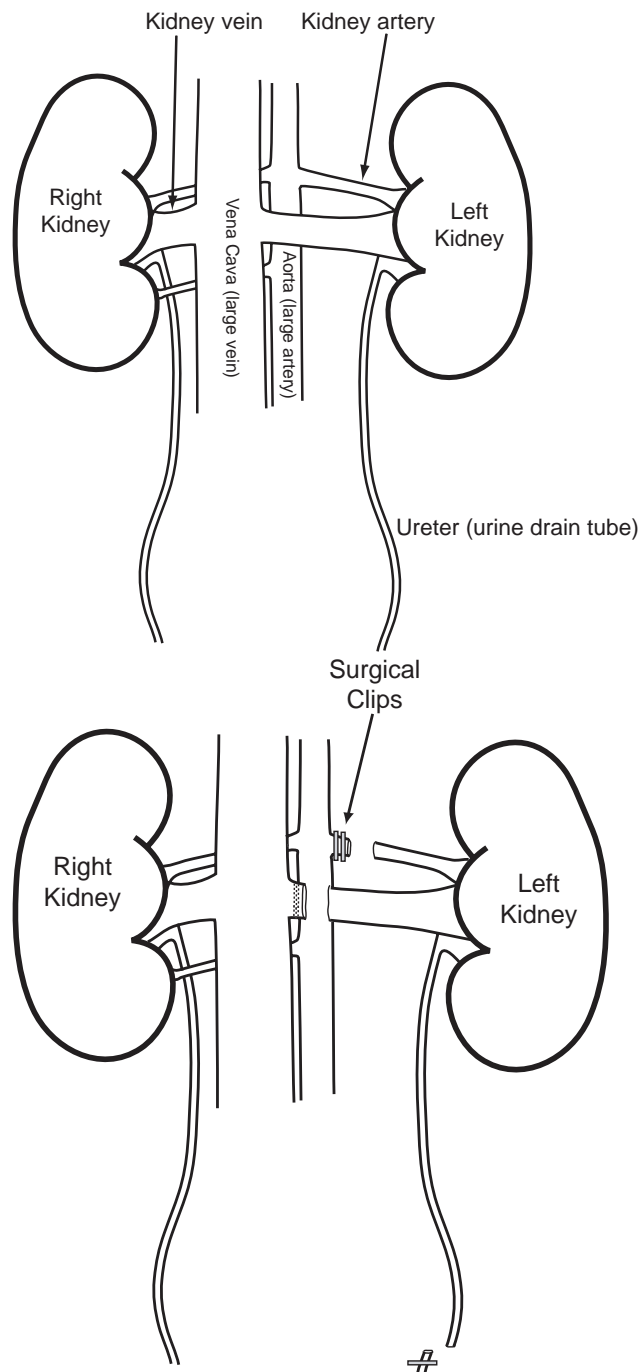
How do you decide which kidney to remove?

This decision is based on several things. The large artery in the body (the aorta) lies on the left side of the abdomen. The large vein (the vena cava) lies on the right side of the abdomen. This arrangement of blood vessels makes the vein to the left kidney longer than the vein to the right kidney. A longer vein is usually easier to sew into a kidney transplant recipient than a short vein. For this reason, we usually take the left kidney.

However, there may be other factors that would influence the decision as to which side would be best. About 1/10 people has more than one artery going to a kidney. In some cases, it may be preferable to remove the kidney with one artery rather than a kidney with two arteries. This makes it easier to sew the kidney into the recipient. If one kidney is larger than the other kidney, we would usually remove the smaller kidney for transplantation and leave the larger kidney in the donor. Occasionally, a kidney may have a cyst, a non-cancerous mass or some other abnormality. It may be best to remove that kidney so that the cyst or mass can be removed before the kidney is transplanted.

How is a kidney removed for transplantation?

There are usually three connections to the kidney: an artery (a blood vessel that carries blood from the heart to the kidney), a vein (a vessel that carries filtered blood from the kidney back to the heart) and a ureter (the drainage tube that carries urine to the bladder). Once the kidney is separated from everything around it, the ureter is clipped and cut. The artery is then doubly clipped and cut. Finally, the vein is clamped and cut. The kidney is then removed and rinsed out with preservation solution before being transplanted.

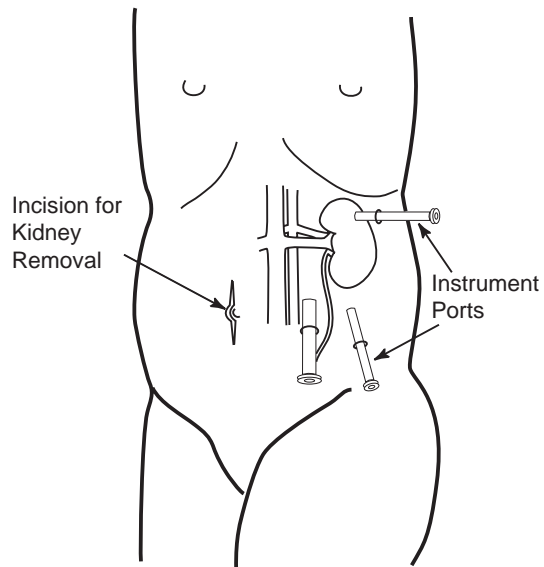


The surgery to remove a kidney for transplantation can be done in one of three ways. In the past, this was done through a flank incision (a cut along the side of the body over one of the lower ribs). The lung is moved upward, the intestines are moved forward and then the kidney is seen behind the intestinal cavity. This surgery requires a relatively large incision and it usually causes more pain and a longer period for healing than laparoscopic kidney removal. But in some situations, the open flank incision is best for removal.

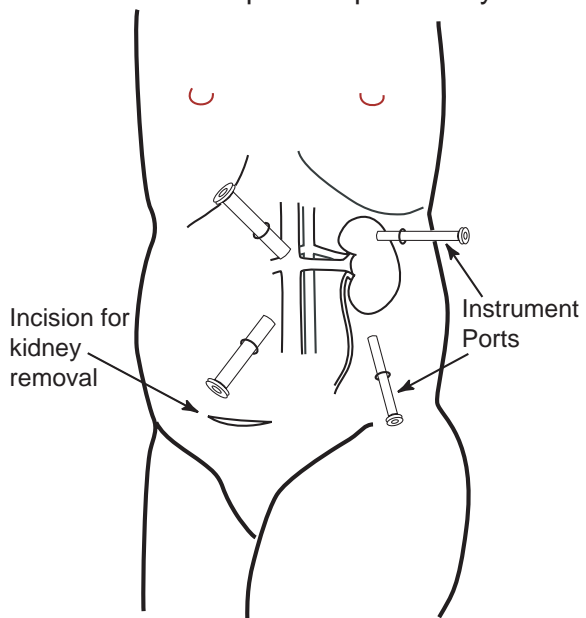
Today we usually remove the kidney laparoscopically using a smaller incision in the abdomen. Hand-assisted laparoscopy is done by making a vertical incision near the belly button through which a hand is inserted to hold and then remove the kidney. One port (a tube through which instruments or cameras can be placed) about the size of an index finger and two ports about the size of a pencil are placed to the side of the incision.

Pure laparoscopic kidney removal is performed by placing four ports in the side of the abdomen. When the kidney is ready, a horizontal incision is made low on the abdomen through which the kidney is removed.

Once the kidney has been removed, the surgical site is carefully examined to make sure there is no bleeding or injury to organs in the area. The incision is closed by sewing the muscle tissue together with stitches that dissolve over about three-months. The skin is usually closed with stitches that will dissolve. Steri-Strips (small strips of adhesive tape) are then put crosswise over the incision line.



Hand-assisted Laparoscopic Kidney Removal



Pure Laparoscopic Kidney Removal

What are the possible complications of having a kidney removed?

Although we try our best to do everything possible to make the surgery safe, there are potential complications of the procedure. The most common complication of a laparoscopic kidney removal is called “conversion.” We cannot absolutely guarantee that every time we attempt to remove a kidney laparoscopically that we will be successful. Rarely, a situation arises in which it becomes necessary to make a larger incision, usually under the ribs, to take the kidney out. Across the nation, this occurs in about 1/50 to 1/75 of surgeries.

Anytime we operate around large blood vessels, there’s always a possibility of some bleeding. If bleeding occurred, a blood transfusion or a second surgery may be necessary. This is relatively uncommon (1/75-1/100 surgeries). Infection is also possible following major surgery such as this. If an infection occurred following a kidney removal, antibiotics may be necessary. It might also be necessary to place a drain catheter or to perform a second surgery to drain an infection pocket. Serious infection occurs in less than 1/100 of these surgeries.

Because other organs lie near the kidney, they need to be moved in order to remove the kidney. It is possible that those organs (the spleen, stomach, intestine, etc.) could be injured during the surgery. If so, a repair surgery would be required. This is quite rare. It is possible that the muscle tissue might not heal together following any surgery causing a hernia. If that happens, a hernia repair surgery would be necessary. Fortunately, this is very rare.

We take special care to make sure that all kidney donors are healthy before approving their surgery. However, no one can predict the future. It is possible that something could happen to the remaining kidney to cause it to fail. If this were to happen, then the kidney donor would need to go on dialysis or receive a kidney transplant him/herself. This is extremely rare.

As with any major surgery, it is possible that a blood clot in the leg, a blood clot traveling to the lung, or pneumonia could develop following kidney donation. We take special precautions to try to prevent such complications. This includes having the donor cough and take deep breaths regularly to keep the lungs opened up. We also encourage donors to walk starting the day following the surgery. Other more rare complications could also occur. If you have specific questions, please ask your surgeon.

How long will I stay in the hospital?

Most kidney donors enter the hospital the evening before surgery and stay 3 – 4 days. Of course, each donor is unique. When you are eating regular food, when your pain is controlled with pain pills and when you are able to do the physical activities necessary at home, you will be ready to leave the hospital.

How much pain will I have? What can you do to control the pain? How long will the pain last?

These are some of the most difficult questions to answer because each person experiences pain in a different way. Following your surgery, you will be given pain medicine through a computerized pump (Computerized Patient Analgesia or PCA) connected to your intravenous line called. This will allow you to take a dose of pain reliever when you feel you need it. It is important that **only you use the pump**. We usually use PCA until the second day following surgery. At that time, we will start pain pills that you can take at home. Most people need to take pain medicine at home for 3-4 weeks following the surgery. However, because each person is unique, it is impossible to predict how long you'll need to take pain pills.

When can I drive again?

We recommend that you not drive for three weeks following the surgery. We also recommend that you avoid driving until you no longer need narcotic pain medication.

When can I go back to work?

If your kidney was removed laparoscopically, you can probably return to work in about one month. If your kidney was removed through a flank incision, you should plan to take about 2 months off work. These are the average times for kidney donors. Some donors are ready to go back to work sooner and some are ready later than four weeks. You will need to listen to your body to know when you are ready. It may be helpful to return to work part-time or doing light work at first.

What physical activities can I do following the surgery?

After you get home from the hospital, you should plan to do a little walking every day. Start slowly and gradually build up your endurance. If you overdo it, you will be sore. Listen to your body and use your head. Starting 2-3 weeks following the surgery, you may begin to do some stretching exercises that will help you to stay limber. Starting three weeks following the surgery, you may begin to do some light exercise. Gradually build up your exercise plan over the next four weeks.

One of the most frustrating things that kidney donor's complain about is lack of energy. Major surgery takes a lot out of a person. When you think about spending 3-4 weeks at home, away from work, you will probably think of some projects around the house that you'd like to finish such as cleaning out a closet, organizing the garage, doing some yard or housework, etc. We advise you to put all those plans on hold for a while. It will be better for you to plan to read some good books, watch movies, listen to music or try some low energy hobbies. Plan to do things that will keep your active mind busy while your body is healing.

When can I shower?

You can take a brief shower (5-10 minutes) starting two days following the surgery. You may let the water run over the Steri-Strips. One week after your surgery, you can stay in the shower or bath as long as you like.

How long will it take before I feel "normal?"

Most kidney donors tell us that it takes approximately 6-10 weeks before they feel back to “normal.” Remember, there is a lot of variation from one person to another. Don’t get discouraged if you don’t feel back to 100% six weeks following your surgery.

Will I need to eat a special diet after donating the kidney?

No. You can eat anything you would like. Of course, we recommend that you eat a healthy diet including plenty of fresh fruits and vegetables.

Can I drink alcohol?

Yes. As with your diet, we recommend moderation.

What about sex?

As with other physical activities, you should take it slow. Wait until you’re ready and don’t overdo it. Listen to your body. You may want to try some non-intercourse sexual activities until you’re feeling better.

What are the chances that the kidney transplant will fail?

Kidney transplants from living donors are the most successful transplants performed. Most living-donor kidney transplants work for many years. Of course, something could happen to the kidney following transplantation that might cause it to fail. Fortunately, this is very uncommon. Following a kidney transplant, we watch the recipient very closely to make sure that things are going well. Sometimes it’s necessary for a kidney transplant recipient to return to the hospital for testing. When this happens, the kidney donor may worry. This is normal. Just remember that most problems that might develop following a kidney transplant can be successfully treated.

What if I have other questions?

We’re happy to answer all of your questions. It may be best to write down questions as you think of them. Please call your transplant coordinator with any questions you may have. That is the best way to contact your surgeon.

David R. Holt, M.D.
David A. Hatch, M.D.
Kent T. Perry, M.D.
Division of Renal Transplantation
Loyola University Medical Center
2160 S. First Avenue
Maywood, IL 60153

Office: 708/216-3454
Mary Kay Larson, R.N. 708/216-3453
Billie Kostro, R.N. 708/216-4920
Denise San Juan, Senior Secretary 708/216-3454
Appointments:
Central Scheduling (all clinics) **708/216-8563**
Oakbrook Terrace 630/953-6600