

Living Kidney Donation: The Surgery

The day of your surgery you will check in at the UW Health First Day Surgery Center. (You will be admitted to your hospital room after the surgery.) While in the surgery center, an intravenous catheter (IV) will be inserted into one of the veins in your arm or hand. You will be given fluids for hydration through this IV.

The nurses will continue to prepare you for your surgery, and will take you to the operating room at the appropriate time. During surgery, a small rubber tube called a Foley catheter will be placed in your bladder. This allows us to monitor the amount of urine your remaining kidney is producing. The Foley catheter will stay in place until the day after surgery. The surgery will take about three hours. There are two different types of donor surgeries: laparoscopic and open. About 90-95 percent of donor surgeries are done with the laparoscopic method.

Laparoscopic surgery

This surgery is less invasive, and often patients will have a shorter recovery time and less pain. Special instruments and a video monitor are used to look at the kidney and blood vessels, and to remove the kidney. A donor must meet certain standards for this type of surgery, and not all donors are able to have their surgery done this way. For example, a person who has already had major abdominal surgery, and/or has complex left and right-sided kidney anatomy, may not be able to have this type of surgery. Your transplant coordinator and doctor will discuss this with you.

The laparoscopic method uses four small incisions on the abdomen (each about an inch in length) to place the instruments and the tiny camera. There is also one larger incision (about three to four inches long) made below the belly button. This is where the kidney is removed. Internal sutures that will dissolve over time are used to close these incisions. Laparoscopic surgery may take about three hours to complete, which is slightly longer than the open method. Even though this is a more technical surgery to perform, most donors at our center have their nephrectomy via the laparoscopic surgery method. It is important to know that if problems occur during a laparoscopic surgery, the surgeon may have to convert to the open method to remove the kidney. This rarely happens, but is a possibility. For some individuals a single port laparoscopic surgery may be an option. This is where the entire surgery is done through a belly button incision. Your doctor will discuss this with you.



These photos show scars typical for patients who donate a kidney via laparoscopy. This patient was photographed two weeks after donation.

Temporary skin abrasions, caused by the patient's sensitivity to surgical tape, were removed from these photos.



Open surgery

Open surgery allows the surgeon to directly see the kidney and blood vessels. This surgery is used on patients with more complex kidney anatomy, and/or on those who have already had major abdominal surgery. With open surgery, the incision is on the right or left side of the abdomen and extends around the side of the body. The doctor will decide which kidney is best to remove. The open incision is about eight to ten inches in length. Both the skin and muscle need to be cut to remove your kidney. The lowest rib on that side may be removed. Loss of this rib will not cause any disability or extra pain. Typically internal sutures that will dissolve over time will be used to close the incision. Open surgery will take about two to three hours.

This photo shows the scar that is typical for a patient who donated a kidney who experienced an open surgery.

