UW Medicine UNIVERSITY OF WASHINGTON MEDICAL CENTER

Transplant Surgery

For a kidney/pancreas transplant

By the time you have your transplant surgery, you may have been waiting a long time. This chapter covers the basics about what happens just before and during surgery. Reading this chapter before surgery will help you know what to expect.

The Phone Call

A UWMC transplant team member will call you when we accept an organ that is a good match for you. When we call, the phone number we call from could be from any area code.

When you receive this important call, we will tell you:

- When to arrive at the hospital and where to check in.
- If you are the primary recipient, which means you are 1st in line, or the backup recipient, which means you are 2nd in line.



When you receive the call for transplant surgery, we will tell you about your next steps.

Only basic information about your donor.

Even while we are planning for your surgery, be prepared that it might be cancelled. This could happen if you have a new health problem, if the kidney is not good quality, or if the final cross-match shows that the kidney is not a good match for you.

If this happens, try not to be discouraged. The fact that we called you may be a good sign that you are moving up on the wait list.

Before Surgery

Before we can go ahead with your transplant surgery:

• You will have more blood tests, a chest X-ray, and other tests. These tests include a final cross-match to find out if your immune system will accept the kidney and/or pancreas.

- If you are on dialysis, you may be asked to go to your regular dialysis session or come to UWMC and have dialysis here.
- Your surgeon, nephrologist, and anesthesiologist will examine you. They will review your health records to make sure you have everything you need for a safe operation. They will also decide what your transplant medicines will be. You may see other doctors, too.
- The transplant team may ask if you want to be part of a research study.
 This choice is up to you. Ask questions to help you decide if it is a good idea for you.
- The nurse will tell you what to do. If there is time, you will be asked to take a shower. You may also be given an enema. You may be given medicines by mouth or through an *intravenous* (IV) line in your arm to prepare you for your surgery.

The final decision to proceed with the transplant depends on your health and the results of your cross-match. When you are cleared for transplant, you will be taken to the operating room (OR).

Your Family and Support Team

During your surgery, your family and support team may stay in the waiting area near the OR or in your hospital room. They need to tell us where they will be so we can stay in touch with them during your surgery. They can use the phone in the waiting area to talk with someone on the team in the OR.

We will tell your support team when your surgery starts. The lead surgeon will talk with your family or other members of your support team when your surgery is over. Other surgery staff will still be working with you at this time to prepare you to leave the OR.

Your support team must be prepared to wait a little while longer to see you after they talk with the surgeon. A nurse will often be the one who tells your support team when they can see you.

Your Surgery

There will be many people in the operating room with you: the surgeon, the anesthesiologist, nurses, and other members of your surgical care team. These providers will work together to prepare you for surgery.

- Your anesthesiologist will:
 - Give you *general anesthesia* to make you sleep. You will receive this medicine by IV and through a mask over your nose and mouth.
 - Place a breathing tube to help you breathe during surgery.
 - Monitor you during the entire surgery to make sure you are asleep and not feeling pain.

- While you are asleep:
 - You may have a large IV placed in your neck vein. You will receive powerful *immunosuppression* medicines through this IV. The IV will still be in place when you wake up from surgery.
 - You will have a *catheter* (thin tube) placed in your bladder to drain urine from the new kidney. The catheter will still be in place when you wake up from surgery.
 - You will be connected to equipment that monitors your body functions and systems.
 - A nasogastric (NG) tube may also be placed to empty your stomach.
 This tube goes through your nose and into your stomach. If you are having a pancreas transplant, you will have an NG tube in place when you wake up from surgery.
- Your incision will be on your right or left lower abdomen, or in the middle. Your surgeon will tell you before surgery where your incision will be.
- A kidney transplant takes about 2 to 4 hours. A kidney/pancreas transplant takes about 4 to 6 hours.
- After surgery you will go to the recovery room. You may wake up there or in your hospital room. You will have a bandage over your incision.

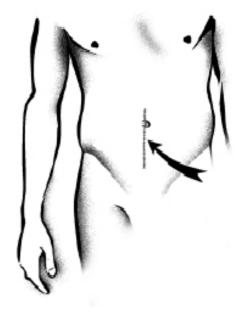
The drawings below and on the next page show where the incisions are made and how your new organ(s) is placed. You will have one of these incisions for your pancreas or kidney/pancreas transplant.

Abdominal Incision for a Kidney Transplant



This drawing shows an incision for a right kidney transplant. Your incision could also be on the left.

Abdominal Midline Incision for Pancreas or Kidney/Pancreas Transplant



This drawing shows the incision for a kidney/pancreas transplant.

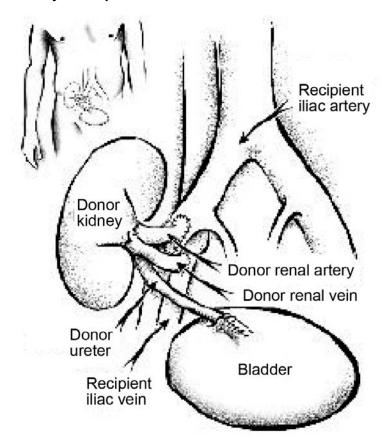
Surgery for a Kidney Transplant

Your new kidney will not be placed where your own kidneys are. Your own kidneys will not be removed during kidney transplant.

These are the usual steps for a kidney transplant (see drawing on page 5):

- Your surgeon will make an incision in your abdomen and expose blood vessels in your pelvis.
- Next, the donor kidney will be placed in your abdomen. The donor kidney blood vessels will be sewn into your blood vessels.
- After blood starts flowing to the new kidney, your surgeon will connect the donor ureter into your bladder.
- Next, the surgeon will place a stent to support the connection of the new ureter to the bladder.

Kidney Transplant



Placement of the donor kidney and ureter and blood vessel connections.

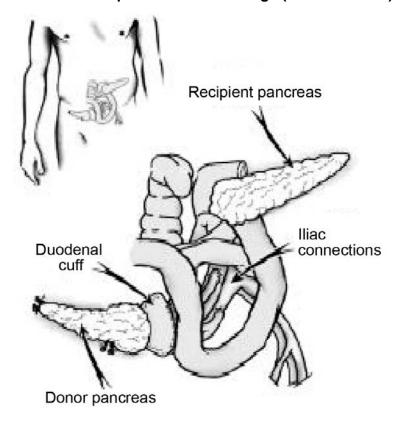
Surgery for a Kidney/Pancreas Transplant

Your own pancreas will not be removed during surgery. These are the usual steps for a transplant of both a kidney and a pancreas:

- Your surgeon will make a midline abdominal incision (see drawing on page 4) and expose the blood vessels in your pelvis.
- The donor pancreas will be placed in your pelvis (see drawing on page 6). Most times, this is on the right side. The donor pancreas blood vessels will be sewn into your blood vessels.
- After blood starts flowing to the pancreas, a connection is made to from the pancreas to your bowel.
 - Because your bowels are involved in this surgery, they may "fall asleep" or slow down after surgery. It may be hard for you to pass gas or have a bowel movement. The nasogastric tube will help relieve pressure in your bowels until they "wake up" and you are able to pass gas. When your bowels start moving again, the nasogastric tube can be removed.

• After the pancreas transplant is done, your surgeon will place the donor kidney on the left side of your pelvis. (See "Surgery for a Kidney Transplant" on page 4.)

Pancreas Transplant: Enteric Drainage (Bowel Drained)



The duodenum collects pancreas secretions, which drain into the bowel (enteric drainage).

After Kidney or Pancreas Transplant Surgery

- You will be taken to the recovery room after surgery. When you are ready, you will be taken to a care unit in the hospital.
- In the recovery room, you will have an ultrasound exam to check how the blood is flowing into your transplanted organ(s).
 - If you received a pancreas transplant, you will spend the first night after your surgery in the intensive care unit (ICU). Nurses will watch you closely and check your blood sugars often.
- If you have heart problems:
 - You will be connected to a heart monitor.
 - You may spend the first night after your surgery in the intensive care unit (ICU).

Insulin After Surgery

- If you have diabetes:
 - And you received **only a kidney transplant**, you will receive insulin through your IV after surgery. You will also return to selfinjected insulin after the IV is stopped. You may need a higher dose of insulin than you needed before transplant. The transplant team will watch your blood sugar levels closely, to see if your insulin dose needs change over time.
 - And you received a kidney/pancreas transplant, you will no longer need insulin after your surgery.
- If you do not have diabetes and receive only a kidney transplant, you may need IV insulin after surgery to control your blood sugar levels.

Tubes and Devices

You may have **some or all** of these devices in place after your surgery:

- An **intravenous tube** (IV) for giving you fluids and medicines. The IV is usually removed on your day of discharge.
- **Nasal prongs** to give you oxygen, until your oxygen level is normal.
- A **bladder catheter** (Foley catheter). This tube drains urine from your bladder. This allows the sutures in this area time to heal before you start urinating normally. The catheter will stay in place for about 3 to 4 days.
- **Surgical staples** to close your incision. These will be removed about 2 to 3 weeks after your surgery.
- A ureteral stent, which will be removed about 4 to 6 weeks after your surgery, either during your hospital stay or in the clinic. Plan to be in the hospital for half a day for this visit.
- A **drainage tube** (also called a JP drain) to drain fluid from your abdomen. Most times, this is removed several days after surgery, when the amount of fluid has decreased.
- A **nasogastric (NG) tube** (after a kidney/pancreas transplant). This will stay in place until you pass gas.
- A **peritoneal dialysis catheter**. This is usually removed during the transplant surgery or 4 to 8 weeks after a kidney transplant.
- **Sequential compression devices** (SCDs). These wraps on your legs inflate from time to time to improve blood flow. They help keep blood clots from forming. Keep these wraps on. Your nurse will remove them when it is safe to do so.



Sequential compression devices (SCDs) help keep blood flowing through your legs while you are lying in bed.

Self-care to Speed Your Recovery

- After you are awake, your nurse will teach you to:
 - Do deep-breathing and coughing exercises. Do these exercises about once every hour to help lower your risk of breathing (respiratory) problems and lung infection (pneumonia).
 - Use your patient-controlled analgesia (PCA) pump. This
 device allows you to give yourself pain medicine when needed.
- You also need to **start walking** as soon as you are able. Walking will reduce your risk for getting blood clots, pneumonia, constipation, and bloating. It will also help speed your recovery.

Like all major surgeries, this surgery involves risks. Please talk with your surgeon about these risks and carefully read the chapter on "Benefits and Risks" in this guide.

Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

Transplant Services: 206.598.3882