Transplant Surgery
For a kidney/pancreas transplant

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

Before Your Surgery

- A UWMC transplant team member will call you when a donor has become available. The team member will give you instructions about when to arrive and where to check in.

- All transplant patients will have more tests (blood tests, chest X-ray, etc.) before surgery. These tests include a final cross-match to determine whether your immune system will accept the kidney and/or pancreas.

- Patients who are on dialysis may need a dialysis treatment before surgery. You may be asked to go to your regular dialysis session or come to UWMC and have dialysis here.

- Your medical team will examine you and review your medical records to determine what you need for a safe operation. At least 3 different doctors (a surgeon, nephrologist, and anesthesiologist) will examine you before your transplant surgery. They will also decide what your transplant medication treatments will be.

- The nurse will tell you what to do before surgery. If there is time, you will be asked to take a shower. You may also be given an enema. You may be given oral or IV (intravenous) medications to prepare you for your surgery.

- Once you get the final clearance to proceed with your transplant, you will be taken to the operating room. Final clearance is determined by your medical condition and a negative cross-match.
Your Family and Support Team

During your surgery, your family or others on your support team may wait in the family waiting room near the operating room or in your hospital room. They need to tell us where they will be waiting so we can stay in touch with them throughout your surgery. They will be able to speak with someone on the team in the operating room by using the phone in the waiting area.

We will tell your support team when your surgery starts. Your surgeon will want to talk with your family or other members of your support team when your surgery is finished.

Your Surgery

- The operating room and the table may feel a bit cold. We will do our best to keep you comfortable.
- You may have a large IV placed in a neck vein to help give you powerful immunosuppression medications.
- You will have a catheter placed in your bladder to drain urine from the new kidney.
- You will be connected to equipment that monitors your body functions and systems.
- Your anesthesiologist will give you medicine that will make you sleep. You will receive this anesthesia by IV and through a mask placed over your nose and mouth.
- The anesthesiologist will also place a tube in your throat (trachea) to help you breathe during surgery. The anesthesiologist will monitor you during the entire surgery to make sure you are asleep and not feeling pain.
- 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.
- The area where the doctor will make your incision and do the surgery is called the operative field. Sterile drapes will be placed around the incision area both to keep you warm and to keep the operative field sterile. 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.
- The surgery takes about 4 to 8 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.
These drawings show where the incisions are made and how your new organ(s) is placed and connected.

**Abdominal Incision for a Kidney Transplant**

![Abdominal Incision for a Kidney Transplant](image)

Your incision will be placed either on the right or the left. This drawing shows an incision for the right kidney.

**Abdominal Midline Incision for Pancreas or Kidney and Pancreas**

![Abdominal Midline Incision for Pancreas or Kidney and Pancreas](image)

You will have one of these incisions for a pancreas or kidney/pancreas transplant.
Surgery for a Kidney Transplant

Your own kidneys will probably not be removed when the new transplant kidney is placed. Sometimes, very large or infected kidneys are removed before or during transplant surgery. But, the new kidney is not placed where your own kidneys are.

These are the usual steps for a kidney transplant:

1. Your surgeon will make an incision in your abdomen and expose your iliac blood vessels. These are blood vessels in your pelvis.

2. Next, the donor kidney will be positioned and the donor kidney blood vessels will be sewn into your iliac blood vessels.

3. After blood starts circulating to the new kidney, your surgeon will connect the donor ureter into your bladder. Your surgeon will decide if you need a ureteral stent (small tube). Some patients need 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 Combined Kidney and Pancreas Transplant

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

1. Your surgeon will make a midline abdominal incision and expose your iliac blood vessels (blood vessels in your pelvis).
2. The donor pancreas will be positioned in your pelvis (usually on your right side), and the donor pancreas blood vessels will be sewn into your iliac vessels.
3. After blood starts circulating to the pancreas, a drainage route is created for exocrine secretions the pancreas produces. These are secretions, such as the enzyme amylase, that leave the pancreas. Your surgeon will use either bladder drainage or enteric drainage to create your drainage route. These are described below.

**Bladder Drainage**

In bladder drainage, the surgeon uses a section of the donor duodenum (intestine) to “bridge” and collect the secretions from the pancreas. The duodenum is then connected to your bladder, and the bladder drains the exocrine secretions.

**Pancreas Transplant: Bladder Drainage**

The duodenum collects pancreas secretions, which the bladder then drains.
**Enteric Drainage**

*Enteric drainage* (bowel drained) is another way to drain the pancreas secretions. In this method, the donor duodenal “bridge” is sewn into a loop of your small bowel. Secretions then drain into the bowel.

**Pancreas Transplant: Enteric Drainage (Bowel Drained)**

The duodenum collects pancreas secretions, which drain into the bowel.

4. After the pancreas transplant is done, your surgeon will position the donor kidney into your pelvis, using the same method that is described in the section “Surgery for a Kidney Transplant” on page 9-4.
After Surgery

- You will be taken to the recovery room after surgery. When you are ready, you will be taken to the patient care unit.

- Within a few hours, you may have an ultrasound to look at the blood flow into your transplanted organ(s).

- If you received a pancreas transplant or have heart problems:
  - You may spend the first night after your surgery in the Intensive Care Unit (ICU) so that you can be monitored closely and your blood sugars can be checked often.
  - You will be connected to a heart monitor.

Insulin After Surgery

- If you have diabetes or receive a pancreas transplant, you will receive insulin through your IV after surgery.

- If you do not have diabetes and receive only a kidney transplant, you may also need IV insulin after surgery to control your blood sugar.

Tubes and Devices

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

- A **bladder catheter** (called a Foley catheter). This tube will drain urine from your bladder. It will give the sutures in this area plenty of time to heal before you start urinating normally. It will stay in place for about 3 to 4 days.

- **Surgical staples** to close your incision. These will be removed 3 weeks after your surgery.

- A **ureteral stent**, which will be removed about 3 to 6 weeks after your surgery. Plan to be in the hospital for half a day for this non-surgical procedure.

- A **tube** in your stomach (after a kidney transplant). Most times, this is removed in the operating room.

- A **nasogastric (NG) tube**, if your pancreas is bowel-drained. This will stay in place until you pass gas.

- A **peritoneal dialysis catheter**. This is usually removed 3 to 6 weeks after a kidney transplant.
Questions?

Your questions are important. Call your doctor or health care provider if you have questions or concerns. UWMC clinic staff are also available to help.

Transplant Services:
206-598-8881

---

Self-care to Speed Your Recovery

- You will have compression stockings on your legs to improve blood flow, which helps prevent blood clots from forming. Keep these stockings on. Your nurse will remove them when it is safe to do so.

- After you are awake, your nurse will teach you to:
  - Do deep-breathing and coughing exercises. Doing these about once every hour will help lower your risk of respiratory (breathing) problems and pneumonia (a lung infection).
  - Use your patient-controlled analgesia (PCA) pump. This device allows you to give yourself pain medicine when needed.

- You also need to walk as soon as you are able. Walking will reduce your risk for developing 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 “Benefits and Risks,” Chapter 2 of this guide.