



Patient information: Kidney transplant (The Basics)

Written by the doctors and editors at UpToDate

What is a kidney transplant? — A kidney transplant is a surgery to insert a new, healthy kidney into a person whose kidneys are diseased ([figure 1](#)).

Why might I have a kidney transplant? — You might have a kidney transplant to treat kidney failure.

Normally, the kidneys filter the blood and remove waste and excess salt and water ([figure 2](#)). When people have kidney failure, also called “end-stage renal disease,” their kidneys stop working. The healthy new kidney can do the job of the diseased kidneys. (People need only 1 kidney to live.)

Kidney failure can be treated in other ways besides a kidney transplant. But people usually benefit most from a kidney transplant. People who get a kidney transplant usually live longer and have a better quality of life than people who get other treatments.

Where can a new kidney come from? — A new kidney can come from a:

- Living donor – A living donor is usually a family member or friend. He or she can be related to you, but doesn't need to be. A living donor can also be someone you don't know, but this is not as common.
- Dead donor – If you don't have a living donor, you can get on a list to get a kidney from a dead donor. An organization called “UNOS” keeps this list. When a new kidney becomes available, UNOS decides who is next on the list to get it.

What needs to happen before I can get a kidney transplant? — Before you can get a kidney transplant, your doctor will send you to a transplant center. There, you will meet with doctors and have exams and tests. To get a kidney transplant, you need to meet certain conditions.

If you have a living donor, he or she needs to go to a transplant center, too. He or she will meet with doctors and have exams and tests. Donors also need to meet certain conditions to donate a kidney. Plus, your donor's blood needs to match your blood.

If you don't have a living donor or if he or she isn't a good match, you can get on the UNOS list. Your doctor can also talk with you about other ways to find a living donor.

More information about how to plan for a kidney transplant can be found in the following topic: (see ["Patient information: Planning for a kidney transplant \(The Basics\)"](#)).

What happens during a kidney transplant? — If you have a living donor, a doctor will remove 1 of his or her kidneys. He or she will also remove the ureter, which is the tube from the kidney to the bladder that urine flows through.

A doctor will make an opening in your lower belly and put the new kidney in your lower belly. He or she will attach the new ureter to your bladder. A new kidney is not put in the same place as the diseased kidneys. In fact, the diseased kidneys are often left in the body.

What happens after a kidney transplant? — After a kidney transplant, you will stay in the hospital for about 3 to 5 days. Your doctor will do exams and tests to make sure your new kidney is working correctly.

You will need to take medicines for the rest of your life. These medicines are called “anti-rejection medicines.” They help your body’s infection-fighting system accept the new kidney. Normally, the infection-fighting system helps people stay healthy by attacking objects in the body that come in from the outside (“foreign objects”). Anti-rejection medicines help keep your body from attacking the new kidney.

What problems can people have after a kidney transplant? — In most cases, people do well after surgery. They can go to work and be active. But some people have problems after a kidney transplant. These problems can happen right after the surgery or years later. They include:

- Rejection of the new kidney – Even though people take anti-rejection medicines, their body might still reject and attack the new kidney. This can happen any time after a kidney transplant. It happens less often when the new kidney is from a living donor than when the new kidney is from a dead donor.
- Side effects from the anti-rejection medicines – The medicines have short-term side effects. For example, they increase a person’s chance of getting serious infections. They also have long-term side effects. For example, they can increase a person’s chance of getting certain types of cancer.
- High blood pressure or heart disease
- Diabetes (high blood sugar, also called “diabetes mellitus”)

What happens if I don’t take my anti-rejection medicines? — If you don’t take your anti-rejection medicines, your body will reject your new kidney and attack it. This will cause your new kidney to stop working.

More on this topic

[Patient information: Planning for a kidney transplant \(The Basics\)](#)

[Patient information: Choosing between dialysis and kidney transplant \(The Basics\)](#)

[Patient information: Chronic kidney disease \(The Basics\)](#)

[Patient information: Polycystic kidney disease \(The Basics\)](#)

[Patient information: Reducing the costs of medicines \(The Basics\)](#)

[Patient information: Hemodialysis \(The Basics\)](#)

[Patient information: Preparing for hemodialysis \(The Basics\)](#)

[Patient information: Peritoneal dialysis \(The Basics\)](#)

[Patient information: Dialysis or kidney transplantation — which is right for me? \(Beyond the Basics\)](#)

[Patient information: Chronic kidney disease \(Beyond the Basics\)](#)

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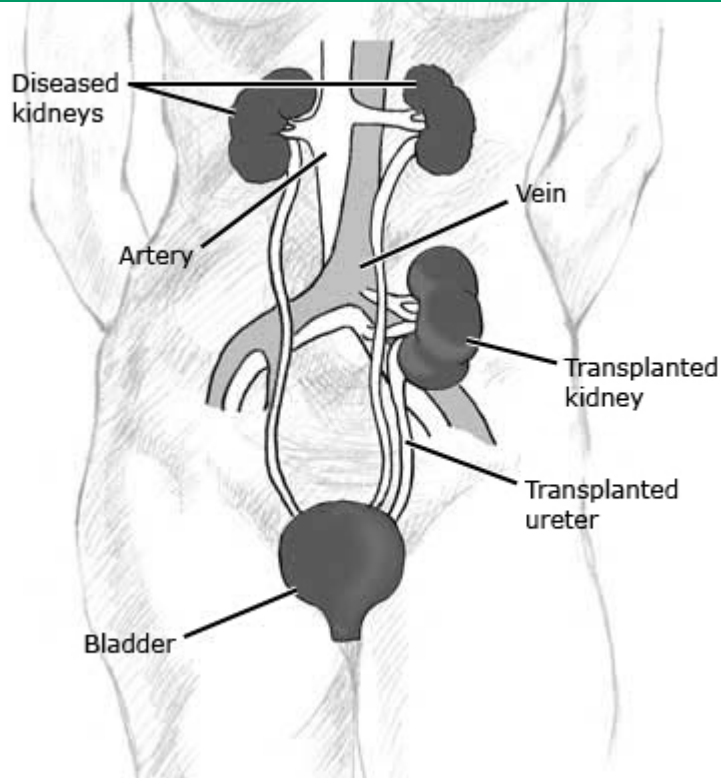
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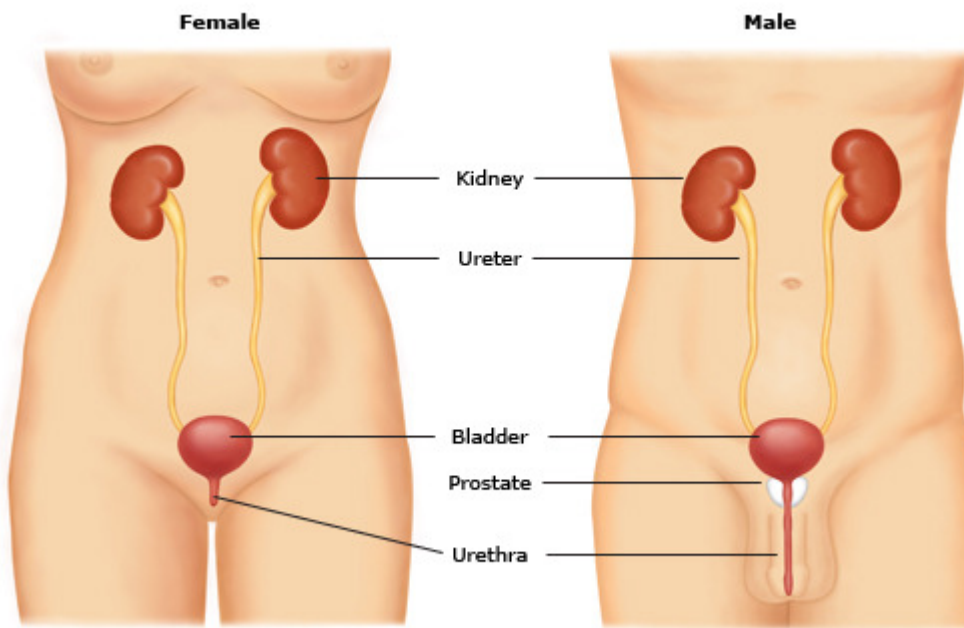
GRAPHICS

Kidney transplant



This drawing shows a person who has had a kidney transplant. The new kidney is put in the lower part of the belly. Its ureter (the tube that carries urine from the kidney to the bladder) is connected to the person's bladder. In many cases, the diseased kidneys are left in place. *Reproduced from: Treatment Methods for Kidney Failure: Transplantation. National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). Available at: <http://kidney.niddk.nih.gov/kudiseases/pubs/transplant>.*

Anatomy of the urinary tract



Urine is made by the kidneys. It passes from the kidneys into the bladder through two tubes called the ureters. Then it leaves the bladder through another tube, called the urethra.

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