

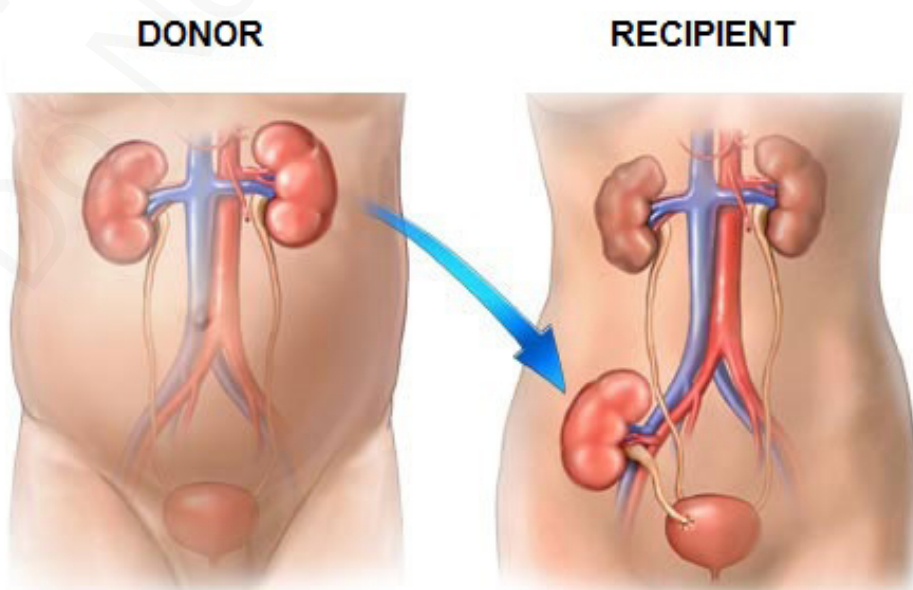
Kidney Transplantation

Purpose

Kidney transplantation is the surgical procedure in which a healthy kidney from another person is transplanted into your body. The donated kidney is able to perform enough of the work that your two failed kidneys used to do, which helps to keep you healthy and symptom-free.

How Kidney Transplantation Works

During a kidney transplantation, a surgeon places the new kidney inside your lower abdomen and connects its artery and vein to your own artery and vein. Your blood then flows through the donated kidney, which functions like your own healthy kidneys did in the past, producing urine. The new kidney usually starts working right away, or it may take a few weeks before it begins to produce urine. Unless your own kidneys are causing infections or high blood pressure, they are left in place.

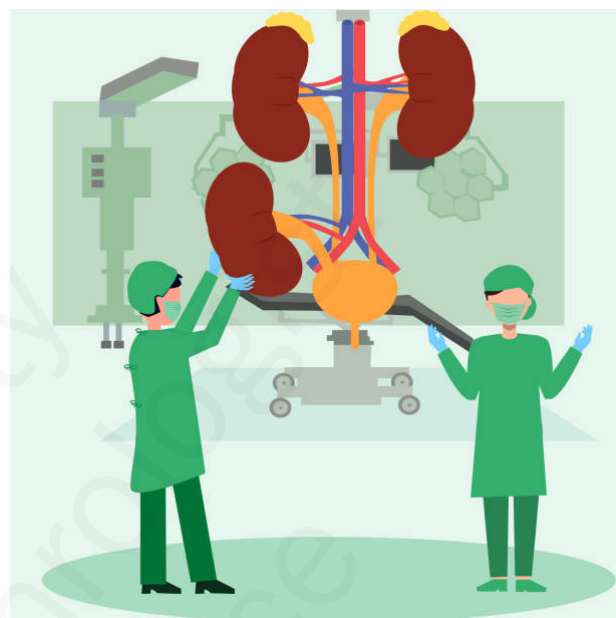


Getting Ready

The kidney transplantation process involves several steps. First, it is important to talk with your doctor to determine if transplantation is a suitable option for you. There may be certain conditions that make transplantation unsafe or unlikely to succeed.

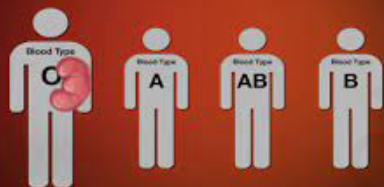
You can receive a kidney from either a deceased donor or a living donor, who can be a related or unrelated person, such as a spouse or a friend. In case you don't have a living donor, you may have to wait on a waiting list for a deceased donor kidney. The wait for a deceased donor kidney can take several years.

The transplant team considers three factors while matching kidneys with potential recipients, which can help predict if the new kidney will be accepted or rejected by your body's immune system.



Kidney Donation Depends on:

1) Blood Type



Recipient	Blood donor			
	O	A	B	AB
O	✓	✗	✗	✗
A	✓	✓	✗	✗
B	✓	✗	✓	✗
AB	✓	✓	✓	✓

(1) Blood type

Your blood type (A, B, AB, or O) must be compatible with the donor's blood type. Blood type is the most crucial matching factor.

(2) Human leukocyte antigens (HLAs)

Your cells carry six important HLAs, three inherited from each parent. Family members are more likely to have a complete match. You may still receive a kidney even if the HLAs are not a complete match as long as your blood type is compatible with the organ donor's, and other tests show no matching problems.

(3) Cross-matching antigens

The final test before transplanting an organ is the cross-match. A small sample of your blood will be mixed with a sample of the organ donor's blood in a tube to check if there's a reaction. If no response occurs, the result is called a negative cross-match, and the transplant operation can proceed.

The Amount of Time Required for a Kidney Transplantation

The amount of time will have to wait for a kidney transplant varies. Due to the shortage of deceased donors, you will be placed on a waiting list. However, if a voluntary donor donates a kidney to you, the transplant can be scheduled as soon as you are both ready. Avoiding the long wait is a significant benefit of live donation.

The surgery typically takes three to four hours, and the usual hospital stay is around a week. After leaving the hospital, you will need to have regular follow-up visits.

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In a living donation, the donor will likely stay in the hospital for the same amount of time. However, a new technique for removing a kidney for donation uses a smaller incision, making it possible for the donor to leave the hospital in two to three days.

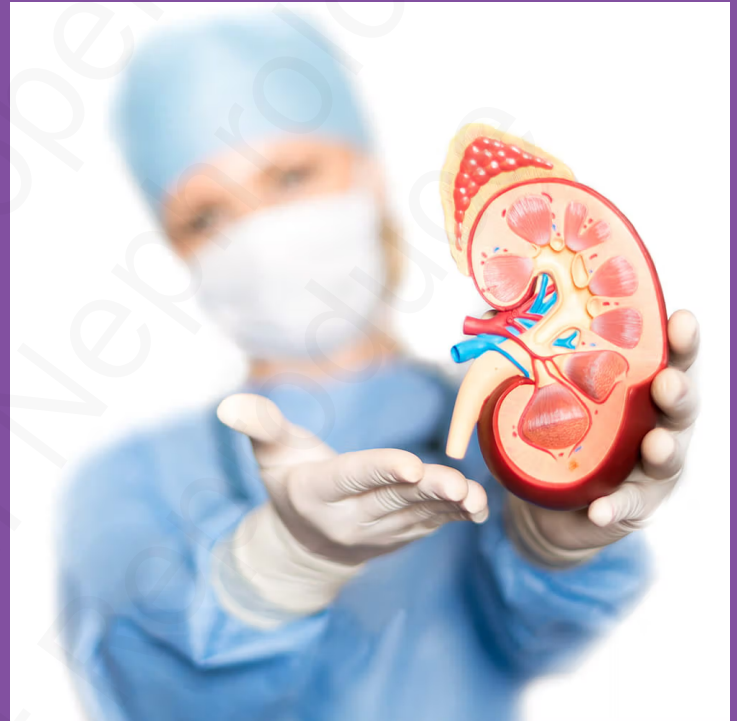
Approximately 85–90% of transplants from deceased donors remain functional one year after the surgery. Transplants from living relatives usually have a higher success rate than transplants from unrelated or deceased donors because they are typically a closer match.

Possible Complications of kidney transplant

Transplantation is the closest thing to a cure for kidney failure. However, even if the match is good, your body may still reject your new kidney. One common cause of rejection is not following medication instructions as prescribed.

Your doctor will prescribe immunosuppressants to help prevent your body's immune system from attacking the new kidney, which is known as rejection. You will need to take these medications daily for as long as the transplanted kidney is functioning. However, in some cases, even immunosuppressant may not stop the body from rejecting the new kidney. If this happens, you may need to go back to some form of dialysis and wait for another transplant.

Although immunosuppressants are effective in preventing rejection, they weaken your immune system, which can increase your risk of infections. Some medications may also cause physical changes, such as facial swelling, weight gain, acne or facial hair growth. However, not all patients experience these side effects, and some can be managed with diet and makeup.



Immunosuppressants work by reducing the function of immune cells, which can increase the risk of developing certain types of cancers. Some immunosuppressants can also cause cataracts, diabetes, excess stomach acid, high blood pressure, and bone disease. With prolonged use, these drugs can also damage the liver or kidneys in some patients.

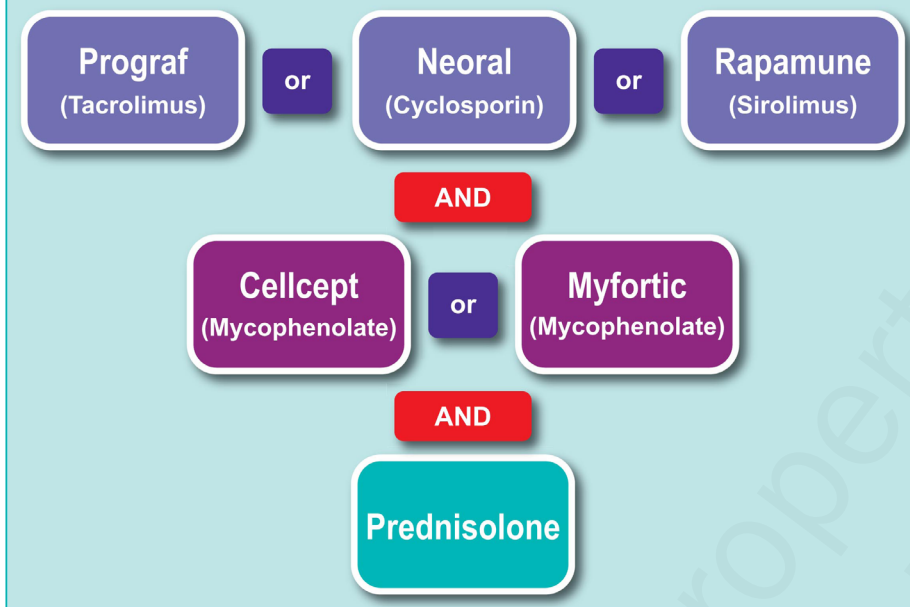
Diet for Kidney Transplantation

The diet for transplant patients is generally less restrictive than that for dialysis patients, although you may still have to limit certain foods. As your medications, blood test results, weight, and blood pressure change, it may be necessary to make adjustment to your diet.

You may need to monitor your calorie intake, as some of your medications may increase your appetite and cause weight gain.

Your diet may also need to be lower in salt, as certain medications may cause your body to retain sodium, which can lead to high blood pressure.

TRANSPLANT MEDICATION COMBINATIONS



Advantages and disadvantages of kidney transplant

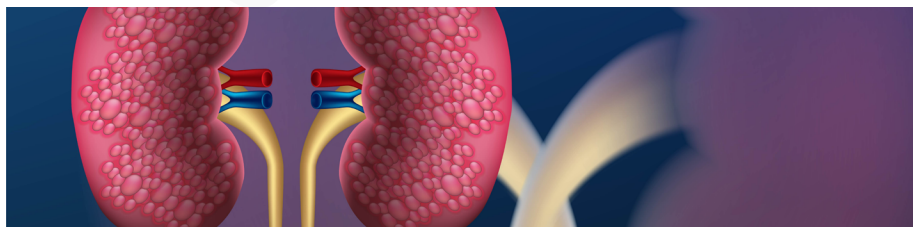
Kidney transplantation has advantages and disadvantages.

Advantages

- + A transplanted kidney functions like a normal kidney, which can make you feel healthier and "more normal."
- + You may have fewer dietary restrictions compared to being on dialysis.
- + You will no longer need dialysis.
- + Patients who successfully undergo the selection process have a higher chance of living a longer life.

Disadvantages

- Kidney transplantation is a major surgery that carries some risk.
- There may be a waiting period for a donor.
- There is a risk of kidney rejection, which means that this transplanted kidney may not last a lifetime.
- You'll need to take immunosuppressant medications, which may cause complications.



Working with your Health Care Team

Here are some of the questions you may want to ask:

- Is kidney transplantation the best treatment choice for me? Why?
- What are my chances of a successful transplant?
- How can I find out if a family member or friend is eligible to donate?
- What are the potential risks for the live donor?
- If no one in my family or friends can donate, how do I get placed on a waiting list for a kidney? How long is the waiting time?
- What are the symptoms and signs of kidney rejection?
- For how long does a transplant typically function?
- What are the side effects of immunosuppressant medications?
- Who will be a part of my healthcare team, and how can they support me?
- Who can I talk to about financial, sexuality, or family concerns related to transplant?
- Where can I find support groups or talk to other people who have faced the same decision?

