

Transplant and Dialysis Information



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This document is intended to be an easy-to-read guide to help patients, families and friends understand the options when addressing kidney failure. These options include dialysis and/or a kidney transplant.

DIALYSIS

Dialysis is the process by which a medical machine filters specific fluids and toxins out of the body. This process acts as a life-saving treatment to prevent the buildup of toxins and other fluids within the body when the kidneys are not functioning properly. This section will answer some frequently asked questions regarding dialysis and whether it is right for you.

What is involved in the process of dialysis?

Dialysis is offered by two methods: **hemodialysis** and **peritoneal dialysis**.

- **Hemodialysis** uses a medical machine to filter and clean your blood. It can be performed several times a week at a dialysis clinic or every day or night at home.
- **Peritoneal Dialysis** filters and cleans the blood by applying a fluid into the body that is pumped in and removed several times a day and overnight.

It is important to note that dialysis is only capable of replacing between 10 to 15 percent of a healthy kidney's function. Because they are missing the remaining functioning of their kidneys, many patients experience feelings of fatigue and weakness throughout treatment. Other possible health concerns that accompany dialysis include muscle cramps and heart problems.

Additionally, patients on dialysis must adhere to a strict diet and take medicine that accompanies dialysis treatment.

Am I able to start dialysis while on the transplant wait list?

Yes, patients are able to be on dialysis while waiting for a kidney on the transplant list. However, receiving a transplant before dialysis or within two years of starting dialysis may prevent additional health complications.

Is my life expectancy better on dialysis or with a transplant?

Transplant patients typically live longer than patients who only remain on dialysis. The strain put on a patient's body by dialysis can cause other health concerns.

KIDNEY TRANSPLANT

Because the process of a kidney transplant is complex and invasive, this treatment option is typically accompanied by a larger number of questions. This section will answer some frequently-asked questions in chronological order of the transplant process—starting with first considerations and proceeding through post-operative questions.

Before Going on the Transplant List

Who is able to receive a transplant?

There are many considerations involved with the kidney transplant process. Because of this, patients are encouraged to discuss it with a doctor to see if they are a candidate. Some common issues that prevent patients from receiving a kidney transplant are having cancer or severe heart disease.

What are the different types of transplants?

There are two types of kidney transplants: **living donor** and **deceased donor**.

- **Living Donor Kidney Transplant**

This form of transplant involves a living person donating one of their functioning kidneys to a patient suffering from kidney failure.

- **Deceased Donor Kidney Transplant**

This form of transplant involves a kidney from a deceased person who is registered as an organ donor being transplanted into a patient suffering from kidney failure.

How well does a transplanted kidney function? How long will it function?

A kidney received from a transplant is capable of delivering 50 to 85 percent of the function of two working kidneys. A transplanted kidney will usually function effectively for 10 to 20 years—10 to 15 for a deceased donor transplant, 15 to 20 for a living donor transplant.

What risks are associated with a transplant?

There are a number of concerns that patients should be aware of and attentive to regarding transplant surgery.

Common Side Effects

The following side effects are typically short-term or resolved over time:

- Scars and pain
- Nausea or feeling ill
- Fatigue

Serious Side Effects

Serious side effects associated with organ transplants are uncommon, and may include:

- Infection
- Bleeding/blood clots
- Fever
- Complications from anesthesia (confusion, pneumonia, possible stroke or heart attack)

The risk of death from transplant surgery is 1 in 3,000, which is less than one percent.

Following surgery, some patients feel overwhelmed with the responsibilities of caring for their kidney as well as the cost of medication.

What are the costs of a transplant, and who pays for them?

The costs of the tests involved in your evaluation as well as the surgery for the transplant are covered by Medicare or private health insurance. Personal costs associated with the process may include taking vacation time from work, childcare, gas, meals, parking and hotels.

Following your transplant, you will need to take medication to prevent your body from rejecting the kidney. Medicare covers most of these medications for three years after your transplant. For patients 65 or older, Medicare covers these medications for the life of the transplant.

Going on the Transplant List

What are the first steps in the transplant process?

To begin the process of going on the transplant list, you must be evaluated for your eligibility to receive a transplant. The evaluation assesses your health status and medical history to determine if you are healthy enough to undergo the transplant process.

- The first step is to schedule a transplant evaluation at a transplant center. The UNOS Transplant Living website can help you to find a center near you (transplantliving.org). Your doctor and/or dialysis team can also help you get started with the evaluation process.

- The evaluation can take several visits to the transplant center, as there are a number of tests and evaluations that need to be performed.
- The evaluation process can take several months to a year, depending on the scheduling of your tests.

Your transplant team will let you know if you are determined to be eligible for a transplant. If you are not, they will inform you of the steps you can take to become eligible, as some patients must lose weight or stop smoking before they can undergo a transplant.

What tests are involved in the evaluation process?

The primary evaluation tests may include:

- Blood pressure, heart rate, and lung function tests
- Blood and urine tests
- Heart stress test
- Colonoscopy (if over 50)
- Pap smear and breast exam (if female)

Doctors also often meet with your support system (family and friends) to prepare them for the process of the transplant and what they should expect while helping you through it.

How long should I expect to wait for my transplant?

The amount of time that you will need to wait for a transplant varies on the type of transplant you are having as well as the availability of a matching donor.

A living donor transplant can be performed within a year of a donor match being established. For a deceased donor transplant, you will be placed on the national waiting list. The average wait for a deceased donor transplant in the U.S. is four to ten years. However, in some cases a matching kidney is never found.

How does the transplant list work?

The national kidney waitlist is managed by the United Network for Organ Sharing (UNOS). Below is an outline of important information about the transplant list and how it operates.

- If you are considered healthy enough for a transplant by your transplant evaluation, you will be placed on the national list.
- When a registered organ donor passes away, their medical information is added to the list where they are matched with a patient waiting for a kidney transplant.
 - The deceased patient is matched through a number of factors, which include blood type, medical condition, the donor's location, and the amount of time the transplant patient has been on dialysis.
 - Transplant centers encourage patients to remain "active" on the list by repeating tests each year. This also helps to keep an up-to-date assessment of your status.

It is important to note that the allocation of donated organs on the transplant list is influenced only by medical factors and the amount of time a patient has been waiting. The list is in no way influenced by a patient's income, race, ethnicity, gender, or sexual orientation.

What is KDPI and how does it influence who receives a specific kidney?

KDPI is an abbreviation for the **K**idney **D**onor **P**rofile **I**ndex. This index serves as a rating system of the quality of a kidney based on how long it is expected to function after being transplanted into a patient.

The scale rates kidneys between 0 and 100, with lower scores indicating that a kidney is likely to last longer when transplanted into a patient. The score of a kidney falls into one of three categories:

- **Standard Criteria**

Kidneys with a KDPI rating between 20 and 85 are considered to meet standard criteria. They are typically given to patients who are expected to live at least as long as the kidney will last. These kidneys last 10 to 15 years on average.

- **High Criteria**

Kidneys with a KDPI rating above 85 are not expected to function properly as long as kidneys rated as meeting Standard Criteria. They are often a good option for older patients, particularly because these patients are expected to have a longer wait on the transplant list. These kidneys last 7 to 10 years on average.

- **Public Health Service (PHS)**

Kidneys categorized as PHS kidneys are from donors who may have been at higher risk of HIV or other infectious diseases. These kidneys can often last as long as kidneys that meet Standard Criteria. However, the screening tests performed on donor kidneys before a transplant are not guaranteed to find an infection that began in the past few weeks.

Patients can decide which categories they would like to be considered for on the transplant list. Patients who choose to only accept kidneys that meet Standard Criteria are likely to wait for a longer amount of time.

THE TRANSPLANT

What is involved in the procedure of a kidney transplant?

Transplant surgery takes between two and four hours. The process typically takes four to eight hours from the waiting room to waking up in the recovery room.

Below is a brief outline of the process of the kidney transplant:

- You will be put under general anesthesia to allow you to sleep through the procedure.
- Your breathing will be assisted by a machine during the procedure.
- The donated kidney will be placed into your body through an incision on your abdomen.
- The new kidney will begin to function and produce urine shortly after being connected to your bladder.

THE POST-OPERATION PROCESS

What should I expect immediately after the transplant?

Following the procedure, you will spend up to a week in the hospital. After that time, you will be allowed to continue your recovery at home. However, you will be required to return to your transplant clinic two to three times a week for checkups while your body heals. You will likely feel the most pain in the first week following surgery, but your doctor can prescribe medicine to address the pain.

It typically takes about a month following surgery before you will feel ready to return to your normal life.

What should I plan for after my recovery?

It is important to remember that a kidney transplant is not a cure for kidney disease. Because of this, you will need to continue to take several steps to maintain your kidney's health. This may include:

- Taking medication to prevent kidney failure and to fight off infection
- Continuing to take some of the medication you took before the transplant
- Regularly having your kidney function and blood pressure checked by a medical professional
- Visiting with your doctors for checkups

What if my transplanted kidney fails?

Your transplant team is able to address the signs of a failed transplant quickly by changing your medicine. This can slow or stop your body from rejecting the new kidney. Because of this, it is extremely important to stay in regular contact with your transplant center for checkups.

In the case that your transplant fails, you will go on dialysis. You will then be able to pursue another kidney transplant.

For more information on kidney failure, transplants and the transplant process, please visit the U.S. Department of Health & Human Services at organdonor.gov, or the Organ Procurement and Transplantation Network at optn.transplant.hrsa.gov.



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