Memorial Sloan Kettering Cancer Center

PATIENT & CAREGIVER EDUCATION

About Your Dialysis Treatment

This information explains your dialysis treatment at Memorial Sloan Kettering (MSK).

Your Kidneys and Their Functions

Your kidneys are 2 bean-shaped organs located in the back of your abdomen (belly) (see Figure 1). Your kidneys have important functions, including:

- Filtering your blood to remove extra fluid and waste products (see Figure 2).
- Balancing the fluids and electrolytes (minerals in your blood).
- Making a hormone called erythropoietin (EPO) that helps you make red blood cells.
- Making hormones that keep your blood pressure and calcium levels steady.

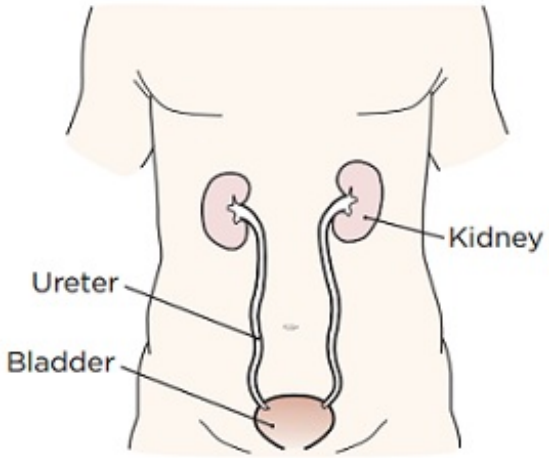

Figure 1. Your kidneys

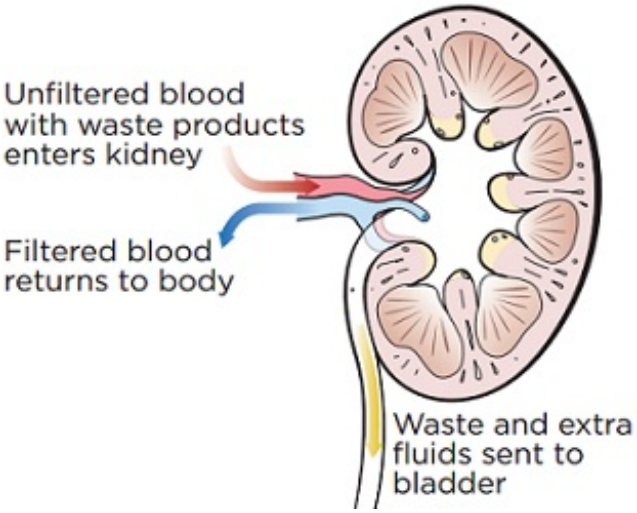

Figure 2. How kidneys work

Kidney Failure

Kidney failure happens when your kidneys can't do their normal functions.

There are 2 types of kidney failure:

- Acute kidney failure happens suddenly and is usually temporary. It can be caused by major blood loss, medications, or infections that affect your kidneys. Your kidneys may start working again within a couple of months.
- Chronic kidney failure usually has no symptoms and happens over many years. With chronic kidney failure, the damage is permanent, and your kidneys won't work again. The 2 most common causes of chronic kidney failure are diabetes and high blood pressure.

Signs and symptoms of kidney failure

Common signs and symptoms of kidney failure can include:

- Decreased urination (pee)
- Trouble breathing
- Fatigue (feeling more tired than usual)
- Confusion
- Swelling in your legs, arms, abdomen, and face
- Nausea (feeling like you're going to throw up), vomiting (throwing up), or loss of appetite

Your doctor may prescribe blood tests to check your blood urea nitrogen (BUN), creatinine, and electrolyte levels. The results of these tests will be higher than normal if you have kidney failure.

About Dialysis

Dialysis is a type of treatment for kidney failure. It replaces the work that your kidneys do by filtering waste products from your body and removing extra fluids from your blood. At MSK, dialysis is the only treatment we offer for kidney failure.

Dialysis treatment is done by using a dialysis machine. During dialysis, your blood travels outside your body and passes through a filter called a dialyzer. The dialyzer functions like your kidneys and cleans your blood. Then, your blood is returned to your body (see Figure 3).

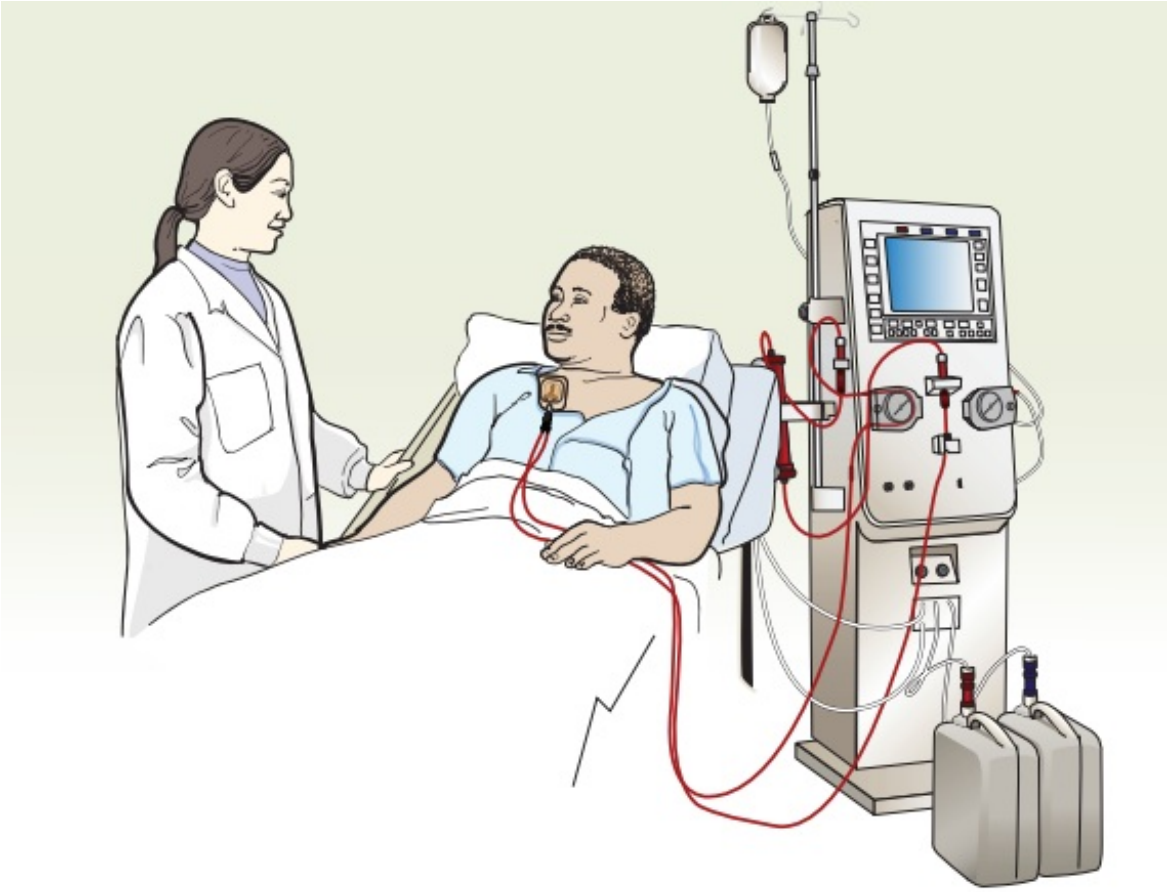

Figure 3. A patient receiving dialysis

Getting dialysis at MSK

Before starting dialysis

You can only get dialysis while you're inpatient at MSK. MSK doesn't offer outpatient dialysis. When you're discharged from the hospital and need to continue dialysis, your Case Manager will find an outpatient dialysis center for your treatment. See the section "Getting dialysis outside of MSK" for more information.

If you're a chronic dialysis patient and are being admitted to MSK, tell your doctor or nurse so that they can let the nephrology team know you will need dialysis.

If you're newly diagnosed with kidney failure while admitted to MSK, you will be seen by an MSK nephrologist (kidney doctor) to discuss a treatment plan. If you decide to do dialysis treatment, your MSK nephrology team will explain the benefits and have you sign a consent form before starting treatment.

Placing the dialysis catheter

Once you have agreed to start dialysis, the next step is to have a dialysis catheter placed. The dialysis catheter is a thin, flexible tube that's placed into a large vein in your neck, chest, or groin area (see Figure 4). The dialysis catheter has 2 lumens (or tubes), 1 red and 1 blue, that sit outside of your body. The red lumen pulls blood out of your body and sends it to the dialyzer to be cleaned. The blue lumen returns the cleaned blood to your body.

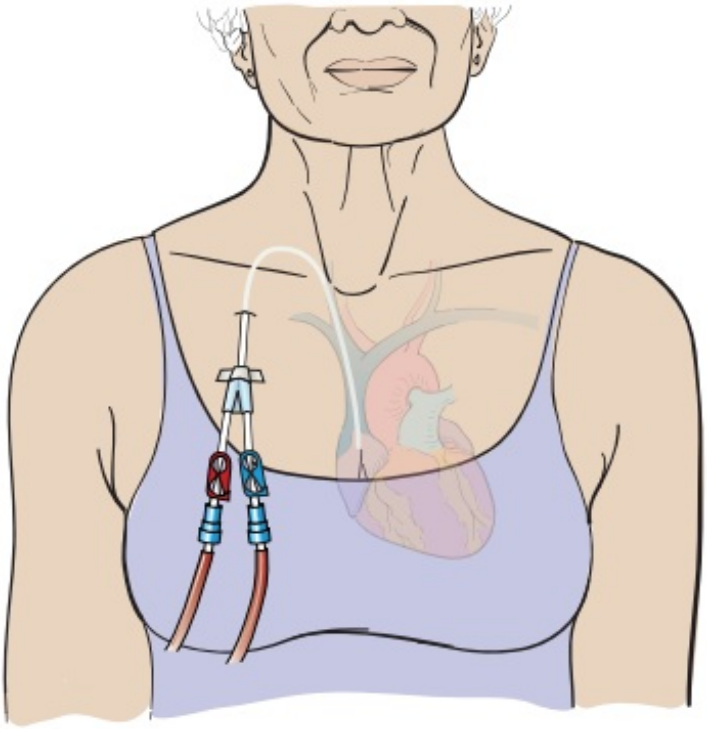

Figure 4. A CVC in the chest

Your doctor or nurse will give you more information about placing the dialysis catheter.

If you have a dialysis access point, such as an AVF (Arteriovenous Fistula) or AVG

(Arteriovenous Graft), tell your nurse. This is so they can make sure your care team follows arm precautions (safety measures) for you. This means no blood pressures or blood draws should be done on that arm.

What to expect during dialysis

On the day of your dialysis treatment, a staff member will take you to the dialysis treatment area. When you arrive, you will be introduced to the dialysis nursing staff and shown the dialysis treatment area. The staff will give you an overview of the dialysis treatment process and will show you how to care for your catheter. The nephrology team of doctors and nurses will answer any questions you have. They will also make sure that you gave consent for the procedure.

You will be placed on a monitor to check your vital signs (blood pressure, temperature, and pulse) every 15 minutes. Then, your dialysis nurse will connect you to the dialysis machine to start your treatment.

During your dialysis treatment, the dialysis nurse will keep taking your vital signs every 15 minutes, or more often if needed. They will monitor your treatment closely and will report any changes to your MSK nephrologist.

Most people don't have any pain or discomfort during dialysis. You can sleep, watch television, use your electronic devices, or read. You can't have any food or visitors during your treatment.

When your dialysis treatment is over, your clean blood will be returned to your body, and you will be disconnected from the dialysis machine. Your dialysis nurse will recheck your vital signs, and let your primary nurse know how the treatment went. Then a staff member will take you to your room.

Hours and location

At MSK, dialysis is done in 2 treatment rooms within the Intensive Care Unit (ICU). The ICU is located on the 11th floor of Memorial Hospital, at 1275 York Avenue, between East 67th and East 68th Streets. Dialysis is done Monday through Friday from 7:00 a.m. to 5:00 p.m., and sometimes on weekends. The unit has 24-hour coverage by nurses and a nephrologist.

Timing of dialysis treatments

Your first dialysis treatment will usually take 2 to 3 hours to let your body get used to the process. Your MSK nephrologist will decide how often you will have treatments in the future. Based on your needs, your treatments may be scheduled 3 times a week for 3 to 4 hours. This depends on your daily weight and lab results.

For chronic dialysis patients, once you're admitted to MSK, your dialysis schedule will be planned by the MSK nephrologist and may be different from your outpatient dialysis schedule.

Daily bloodwork and weights

All dialysis patients need to be weighed daily and have bloodwork done by 5:00 a.m. Your MSK nephrology team will evaluate you every day to see what your dialysis needs are.

Getting dialysis outside of MSK

Before you're discharged from MSK, your MSK nephrologist will talk with you about continuing your dialysis treatments.

- If you need to continue getting dialysis treatments, your Case Manager will help you find an outpatient dialysis center. The Case Manager will give you a list of dialysis centers to choose from and will coordinate your ongoing schedule with the outpatient dialysis center before you're discharged.
- If your kidneys recover and you don't need dialysis anymore, your dialysis catheter will be removed before you go home.

MSK's Dialysis Treatment Center hours and location

At MSK, the dialysis treatment area is located within the Intensive Care Unit (ICU). The ICU is located at:

Memorial Hospital at 1275 York Avenue (between East 67th and East 68th Streets)
New York, NY 10065
Take the M elevator to the 11th floor

Contact Information

If you have any questions or concerns about your inpatient dialysis treatment, call the dialysis unit at 212-639-6836 Monday through Friday from 7:00 a.m. to 5:00 p.m. After hours, or on a weekend or holiday, your primary team will contact the nephrology department.

Resources

American Kidney Fund
800-638-8299
www.kidneyfund.org

American Association of Kidney Patients
800-749-2257
www.aakp.org

Kidney School
608-833-8033
www.kidneyschool.org

For more resources, visit www.mskcc.org/pe to search our virtual library.

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