

Kidney Disease: Hemodialysis

Dialysis is a process that does the work for your kidneys when you have kidney failure. Dialysis filters wastes, removes extra fluid, and restores the proper balance of chemicals in the blood.

"Hemo" means "blood." Hemodialysis uses a human-made filter called a dialyzer to clean your blood.

Hemodialysis does not cure chronic kidney disease, but it can help you live longer and feel better.

How is hemodialysis done?

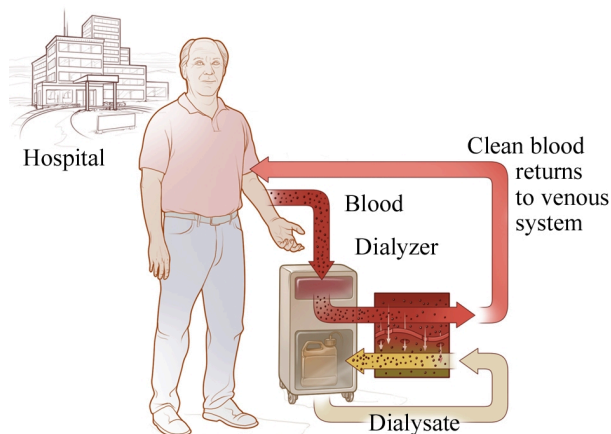
For hemodialysis, you are connected to a dialysis machine by tubes attached to your blood vessels. Your blood is slowly pumped through a filter, or dialyzer. The dialyzer removes waste products and extra fluids. The filtered blood is then pumped back into your body.

About once a month you will have blood tests. These tests help your doctor see how well hemodialysis is working.

How many treatments will you need?

A hemodialysis session usually lasts from 3 to 5 hours and is usually done 3 times a week. You can read, talk, watch television, or sleep during your dialysis sessions. Some kinds of home hemodialysis are done more often or for longer amounts of time.

Once you start dialysis, you will be on a regular schedule. For example, you might go in for treatments every Monday, Wednesday, and Friday. Or you may have home hemodialysis every night when you get home



from work.

It is very important that you have your treatments as often as your doctor tells you to. Following your treatment schedule will allow you to stay as healthy as possible and avoid being in the hospital.

Where will you go for treatments?

You will go to a clinic called a dialysis center for your treatments. Specially trained nurses and technicians will handle your care. It is a good idea to visit the dialysis center before your treatments begin. This can help you get to know the staff and help you feel more at ease around the equipment.

Some centers will train you to do your own hemodialysis at home or in a self-care center. A friend or family member who is willing to help with your treatments may need to go through the training with you. Home dialysis can give you more freedom, but a regular

schedule is still very important.

Preparing for hemodialysis

Before treatments can begin, your doctor will need to create a site where blood can flow in and out of your body during the dialysis sessions. This is called the dialysis access.

The doctor will prepare your dialysis access weeks to months before you need it. This allows the access time to heal.

The types of dialysis access are:

- **Fistula.** To make a fistula, your doctor will attach an artery to a vein, usually in your lower arm. Once the fistula heals, the dialysis needles can go directly into it.
 - Fistulas tend to be stronger and less likely to get infected than grafts. But they need to be prepared at least several months ahead of time.
- **Graft.** Your doctor may implant a tube called a graft under the skin in your arm. The tube connects an artery and a vein. The dialysis needles can then be put into the graft for hemodialysis.
 - A graft is a good choice if you have small veins or other problems. A graft can sometimes be used as soon as 1 week after placement.

- **Central vascular access device (CVAD).** A thin tube called a catheter may be used until you are able to get a permanent access. A CVAD is usually placed in a vein in your neck, chest, or arm.

Pros and cons of hemodialysis

On the plus side:

- Hemodialysis at a center is done by trained health workers who can watch for any problems.
- It allows you to be in contact with other people having dialysis. This can help provide emotional support.
- You can schedule your treatments in the evenings so you can keep working. Or you may be able to do home hemodialysis, which gives you more control over your schedule.

On the minus side:

- Hemodialysis needs to be done on a set schedule, usually 3 times a week. This can make it hard to have a normal life.
- It can cause side effects. The most common side effects are low blood pressure and muscle cramps. These can often be treated easily.
- It requires needle sticks during every treatment, which bothers some people. Others get used to it and even do the needle sticks themselves.

Do you have any questions or concerns after reading this information? It's a good idea to write them down and take them to your next doctor visit.