

Dialysis

Dialysis is a treatment used when your body's kidneys stop working well. Extra fluids and wastes are removed from your body with dialysis. There are 2 types of dialysis:

- Hemodialysis
- Peritoneal dialysis

Hemodialysis

With hemodialysis, small amounts of blood are pumped out of the body and through a dialysis machine that has a filter called an artificial kidney. This machine filters extra fluid and wastes from the blood. The blood is then pumped back into your body. Treatment can be given at a dialysis center or at home. Talk with your doctor and health care team about your options.

- Treatments take about 4 hours and are done 3 times each week in a dialysis center.
- Treatment at home is done more days of the week for shorter periods of time. Home treatment requires you and your partner to attend 3 to 8 weeks of training to learn to run the machine and to track your treatments.

For this treatment, there needs to be a site where the blood is taken out of the body and then returned to the blood stream. This is called an **access**. After the access is made and healed, 2 needles are inserted into the access. One needle draws the blood out and the other needle returns the blood to the body.

Access Sites

There are three main types of access sites.

- **AV Fistula** – With minor surgery, an artery is joined to a vein under the skin. This is most often done in an arm.
- **Graft** – With minor surgery, a soft plastic tube is used to join the artery and vein under the skin.
- **A central catheter** – For temporary dialysis, the doctor can put in a catheter in a large vein, most often in the neck.

Peritoneal Dialysis (PD)

With peritoneal dialysis, a catheter is put into the abdomen in surgery. The lining of your abdomen acts as a natural filter for your treatment.

Special fluid, called **dialysate**, is put into the abdomen through the catheter. The fluid stays in the abdomen for several hours, called dwell time. During this time, the body's extra fluid and wastes move from the blood in the lining of the abdomen to the fluid. This fluid becomes much like urine and it is then drained from the body through the catheter into a bag.

Clean fluid is then put into the abdomen, and the steps are repeated. Each drain and fill cycle is called an exchange and takes about 30 to 40 minutes.

A dialysis nurse would train you and a family member or friend for a week or two to learn how to do the exchanges and prevent infections. After training, most people are able to do peritoneal dialysis on their own.

There are 2 main types:

- **Continuous Ambulatory Peritoneal Dialysis (CAPD)** is done 3 to 5 times each day and the fluid stays in the abdomen for 4 to 6 hours or more. This can be done anywhere there is a clean, private area and does not require a machine.
- **Automated Peritoneal Dialysis (APD), also called Continuous Cycling Peritoneal Dialysis (CCPD)**, is done using a special machine called a cyclor. The fluid stays in the abdomen for a shorter time, about 1½ hours. The machine is set up and the person is connected for 8 to 10 hours during the night. The machine fills and empties the abdomen while the person sleeps. The person is unhooked from the machine during the day.

It can take time to get used to the feeling of the fluid in your abdomen. Some people feel bloated or full, but you should not feel any pain. Many people feel the same as usual, even with the fluid.

Talk to the staff if you have any questions or concerns.