

Peritoneal Dialysis

Purpose

Peritoneal dialysis is a procedure that replaces the work of your kidneys. It removes extra water, wastes, and chemicals from your body. This type of dialysis uses the lining of your abdomen to filter your blood. This lining is called the peritoneal membrane.

How It Works

A cleansing solution, called dialysate, travels through a special tube into your abdomen. Fluid, wastes, and chemicals pass from tiny blood vessels in the peritoneal membrane into the dialysate. After several hours, the dialysate gets drained from your abdomen, taking the wastes from your blood with it. Then you fill your abdomen with fresh dialysate and the cleaning process begins again.

Getting Ready

Before your first treatment, a surgeon places a small, soft tube called a catheter into your abdomen. This catheter always stays there. It helps transport the dialysate to and from your peritoneal membrane.

Types Of Peritoneal Dialysis

There are three types of peritoneal dialysis:

- **Continuous Ambulatory Peritoneal Dialysis (CAPD).** CAPD is the most common type of peritoneal dialysis. It needs no machine. It can be done in any clean, well-lit place. With CAPD, your blood is always being cleaned. The dialysate passes from a plastic bag through the catheter and into your abdomen. The dialysate stays in your abdomen with the catheter sealed. After several hours, you drain the solution back into the bag. Then you refill your abdomen with fresh solution through the same catheter. Now the cleaning process begins again. While the solution is in your body, you may fold the empty plastic bag and hide it under your clothes, around your waist, or in a pocket.
- **Continuous Cyclic Peritoneal Dialysis (CCPD).** CCPD is like CAPD except that a machine, which connects to your catheter, automatically fills and drains the dialysate from your abdomen. The machine does this at night while you sleep.
- **Intermittent Peritoneal Dialysis (IPD).** IPD uses the same type of machine as CCPD to add and drain the dialysate. IPD can be done at home, but it's usually done in the hospital. IPD treatments take longer than CCPD.

Who Performs It

CAPD is a form of self-treatment. It needs no machine and no partner. However, with IPD and CCPD, you need a machine and the help of a partner (family member, friend, or health professional).

The Time It Takes

With CAPD, the dialysate stays in your abdomen for about 4 to 6 hours. The process of draining the dialysate and replacing fresh solution takes 30 to 40 minutes. Most people change the solution four times a day.

With CCPD, treatments last from 10 to 12 hours every night.

With IPD, treatments are done several times a week, for a total of 36 to 42 hours per week. Sessions may last up to 24 hours.

Possible Complications

Peritonitis, or infection of the peritoneum, can occur if the opening where the catheter enters your body gets infected. You can also get it if there is a problem connecting or disconnecting the catheter from the bags. Peritonitis can make you feel sick. It can cause a fever and stomach pain.

To avoid peritonitis, you must be careful to follow the procedure exactly. You must know the early signs of peritonitis. Look for reddening or swelling around the catheter. You should also note if your dialysate looks cloudy. It is important to report these signs to your doctor so that the peritonitis can be treated quickly to avoid serious problems.

Your Diet

Diet for peritoneal dialysis is slightly different than diet for hemodialysis.

- You may be able to have more salt and fluids.
- You may eat more protein.
- You may have different potassium restrictions.
- You may need to cut back on the number of calories you eat. This limitation is because the sugar in the dialysate may cause you to gain weight.

Pros & Cons

There are pros and cons to each type of peritoneal dialysis.

CAPD

Pros

- You can perform treatment alone.
- You can do it at times you choose.
- You can do it in many locations.

- You don't need a machine.

Cons

- It disrupts your daily schedule.

CCPD

Pros

- You can do it at night, mainly while you sleep.

Cons

- You need a machine and help from a partner.

IPD

Pros

- Health professionals usually perform treatments.

Cons

- You may need to go to a hospital.
- It takes a lot of time.
- You need a machine.

Working With Your Health Care Team

Questions You May Want To Ask

- Is peritoneal dialysis the best treatment choice for me? Why or why not? Which type?
- How long will it take me to learn peritoneal dialysis?
- What does peritoneal dialysis feel like? Does it hurt?
- How will peritoneal dialysis affect my blood pressure?
- How do I know if I have peritonitis? How is peritonitis treated?
- As a peritoneal dialysis patient, will I be able to continue working?
- How much should I exercise?
- Who will be on my health care team? How can they help me?
- Who can I talk with about sexuality, finances, or family concerns?
- How/where can I talk to other people who have faced this decision?

Dialysis Is Not a Cure

Hemodialysis and peritoneal dialysis are treatments that try to replace your failed kidneys. These treatments help you feel better and live longer, but they are not cures for ESRD. While patients with ESRD are now living longer than ever, ESRD can cause problems over the years. Some problems are bone disease, high blood pressure, nerve damage, and anemia (having too few red blood cells). Although these problems won't go away with dialysis, doctors now have new and better ways to treat or prevent them. You should discuss these treatments with your doctor.