

# Peritoneal Dialysis

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## What is it?

Peritoneal Dialysis is done by the patient him/her self. It involves having a catheter placed in the lower abdomen, the peritoneal cavity, by a surgeon. The actual dialysis is performed when a bag of fluid is drained into the peritoneal cavity via the catheter and allowed to dwell there for a number of hours before it is drained out and replaced with fresh fluid. The removal of toxins and excess fluid occurs within the peritoneal cavity via osmosis and diffusion through the very small blood vessels located in the peritoneal membrane. This may be done 4-5 times a day every day, or may be done at night, by a machine, while you are sleeping. There are no needles or blood involved during the treatments, which are painless. The schedule for the exchanges allows the patient some freedom for scheduling when the exchanges are done though the need to have the correct number of exchanges done daily remains. At our facility there are two clinic visits a month, one to see the physician, nurse, social worker and dietician, and one other for monthly blood draws.

## Why is it called needleless dialysis?

This term is associated with peritoneal dialysis because, unlike hemodialysis, there are no needles used for the treatments. The patient simply opens the tubing connected to the catheter and allows a bag of fluid to drain into the peritoneal cavity. This is the area below the waistline, commonly referred to as the belly. The fluid remains here for 3-4 hours, and then is drained out through the catheter and replaced with fresh fluid. The drained fluid contains the toxins and excess fluid from the body. This looks and smells just like urine, though the correct term for it is effluent. This is called an exchange, for one is exchanging fresh fluid for dwelled fluid. The process of daytime exchanges is called CAPD, Continuous Ambulatory Peritoneal Dialysis. This process may also be done at night while you are sleeping. This is called APD, Automated Peritoneal Dialysis. The exchanges are done by a machine that is setup before bedtime and automatically places the fluid into the peritoneal cavity through the catheter a number of times during the night. The machine actually performs the exchanges, so you are sleeping all night while the machine does the work. In the morning, you simply disconnect from the machine, dispose of the used supplies and go about your day.

## Who does Peritoneal Dialysis?

Almost anyone can perform peritoneal dialysis. It is done by the 100-year-old who enjoys working in his garden; by the 78-year-old who plants prize-winning pumpkins; by the grandmother who enjoys traveling across the country to visit her grandchildren; by the young business man who works all week and vacations in Disney World with his young family; by the single mother bringing up her child.

There are very few impediments to being accepted for peritoneal dialysis. Some of those are numerous past abdominal surgeries, some disease processes, very severe difficulties with manual dexterity, and the inability to be responsible and follow directions.

Those who choose peritoneal dialysis are well trained in the process before they are allowed to do so on their own. There is always a peritoneal dialysis nurse on call and available for questions, concerns, etc. that a patient may have, day or night. You are never alone! Some of the

advantages of peritoneal dialysis are that it helps retain kidney function as long as possible; it can be done on your schedule; it does not involve multiple visits to the center at someone else's schedule and it allows you more freedom with dietary restrictions, and the ease of travel,

Interested? Curious? Want to learn more? Call your unit's Peritoneal Dialysis Nurse and he/she will be more than happy to talk with you and answer any questions you may have.