Peritoneal dialysis is a method of treating kidney failure by removing waste products and excess fluid from the blood. It uses the peritoneum, the membrane lining the inside of the abdominal cavity, as a natural filter. In peritoneal dialysis, a small tube, called a dialysis catheter, is inserted into the abdominal cavity. A solution, called dialysate, flows through the catheter and into the abdominal cavity. The dialysate absorbs waste products and excess fluid from the blood, which then drains back into the catheter. This process can be repeated several times a day to manage kidney function and maintain health.

Compared to hemodialysis, peritoneal dialysis offers several advantages. It can be done at home, which means patients have more flexibility and control over their treatment. It also requires less time than hemodialysis, allowing patients to participate in daily activities. Peritoneal dialysis is considered an effective and safe treatment option for patients with kidney failure, and it can be tailored to meet individual needs.