

Home Dialysis Options Information for Health Care Providers The right care, in the right setting, at the right time



What do your kidneys do?

The kidneys are two bean shaped filtering organs located on either side of your spine, just under your rib cage.

Your kidneys have roles in many important bodily mechanisms including:

- Fluid balance;
- Filtering waste and toxins;
- Balancing nutrients; and,
- Making hormones important in controlling: bone health, blood pressure, and hemoglobin.

When a patient has kidney disease, as the disease progresses, often so does the inability of the kidneys to perform their role(s). Once a patient reaches a certain level of kidney disease/failure, they may need renal replacement therapy (dialysis).

Did you know there are options?

Currently, there are three types of renal replacement therapies that can be offered to patient's needing dialysis, which include Home Hemodialysis, Peritoneal Dialysis, and, In Center Hemodialysis.

Both home hemodialysis and peritoneal dialysis can be performed from the comfort and convenience of the patient's own home, giving the patient flexibility in choosing when to do their prescribed treatments.

In-centre hemodialysis requires the patient to travel to a dialysis

facility for treatment often three to four times per week.

Peritoneal Dialysis

Peritoneal dialysis (PD) involves infusing a cleaning fluid, called dialysate, into the abdomen through a permanent catheter.

The PD catheter is inserted in day surgery and once inserted takes approximately six weeks to heal. After the healing, the catheter is ok to use.

PD works on a drain-fill-dwell cycle. This means, the patient will drain the old fluid (effluent) from their abdomen that will contain removed wastes and toxins. After this, they will fill with a new cleaning fluid (dialysate). They will allow the dialysate to sit, or dwell, in their abdomen for the prescribed time (generally 4-6 hours).

There are two types of PD

- 1. Continuous Ambulatory Peritoneal Dialysis (CAPD).
- 2. Automated Peritoneal Dialysis (APD).

CAPD

- Four exchanges a day, each day.
- Performed at breakfast, lunch, supper, and at night.
- Each exchange takes about 30 minutes.

Training Time: Approximately one week.

ADP

- Done while sleeping each night by using a machine cycler.
- Each treatment generally eight to ten hours long.
- Takes approximately 30 minutes to set up cycler each night.

Training Time: Approximately three days (following CAPD training).

It is important to note that:

- The patient needs a catheter for PD. This catheter needs to be surgically inserted and is permeant.
- Once started on PD the patient will likely always be filled with solution (in their abdomen, normally two litres).
- PD is done every day; and,
- Typically, the patient will train for CAPD then switch over to ADP. This is done so the patient will know how to perform manual exchanges for extraordinary circumstances, i.e., power outages.

Home Hemodialysis

Home hemodialysis (HHD) involves using a machine to remove blood from the patient's body from their vascular access. The removed blood is sent through a dialyzer, which acts as an artificial kidney that filters wastes and toxins, and then returns the "cleaned, filtered" blood back into the body for recirculation.

A vascular access is required for hemodialysis. Currently the most common accesses used are:

- 1. Arteriovenous Fistula (AVF).
- 2. Central Venous Catheter (CVC).

The AVF is the recommended choice of access and is surgically created in day surgery. It involves making an incision at the site of creation (normally wrist), and it joins an artery to a vein. Healing takes approximately six to seven weeks. Once healed, the AVF needs to be needled to be used for hemodialysis. This will require inserting two needles into the AVF each treatment and removing them after the treatment.

The CVC is a surgical line inserted, typically into the chest. A CVC can also be inserted into the neck or groin. Once inserted, and placement is verified by x-ray, the CVC can be used immediately.

Training time for HHD is typically between five to eight weeks. There are options to do daytime or nighttime treatments. Machine setup typically takes 30 minutes.

It is important to note that:

- Patients need a vascular access for HHD.
- If patients have an AVF, they or their caregiver will be trained to insert and remove the needles.
- If patients have a CVC, they or their caregiver will be trained to change the CVC caps and dressing weekly; and,
- In extraordinary circumstances, i.e., power outages, or machine maintenance, it may be required for the patient to go

in hospital for treatments until the issue(s) are rectified.

Support Available

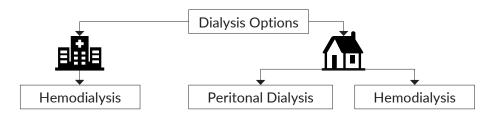
Once a patient starts a home dialysis modality there is ongoing support and resources available to them, some of which include:

- Detailed training provided by health care professionals;
- 24-hour technical support for all machine issues;
- No cost (all essential supplies and equipment provided and delivered) and,
- A dedicated health care team to oversee patient treatment details and outcomes.

What are the benefits of Home Dialysis?

| Benefits | PD | HHD |
|--|-----|--------|
| Convenience | Yes | |
| Flexibility | Yes | |
| Less dietary restrictions | Yes | |
| Less fluid restrictions | Yes | |
| Portable (able to travel) | Yes | Varies |
| All training and essential supplies provided free of charge | Yes | |
| 24 hour technical support | Yes | |
| Can be done while you sleep | Yes | |

The more involved patients are in their own care, the better the results.



If you have any questions or concerns, please reach out to your dialysis care provider.

