

6. Treatment for Kidney Disease

Since another medical ailment usually causes chronic kidney disease, the most effective way to treat kidney disease is to treat and manage the disease that originally caused your kidney damage, for instance diabetes and hypertension.

In Malaysia, some 57% of kidney failure patients are diabetics and 6% hypertensive. Hence, your doctor will use blood and urine tests to regularly monitor your kidney's condition. These tests will determine how your kidneys are functioning and whether any changes to your treatment plan is required.

6.1. Chronic Kidney Disease (CKD)

CKD is often progressive, and if this happens, your symptoms may occur more frequently or become severe.

Depending on your stage of CKD, you may need to make dietary changes to help slow its progression. You may be asked to limit your use of salt or watch how much potassium or phosphorus is in your diet.

In the early stages of this disease, only a small part of the kidney is involved. Some people have destruction of the glomerulus or renal tubules. Early kidney disease can cause scarring, which interferes with the blood flow to a portion of the kidney.

In many cases, early detection and treatment may keep CKD from getting worse.

Over time, if CKD is not treated, End Stage Kidney Failure occurs, one will require immediate and ongoing dialysis treatment or a kidney transplant.

In most patients, medication is used in addition to dietary restrictions to prevent further damage to the kidneys. This is done to try and delay the progression to End Stage Kidney Failure.

6.2. Kidney Failure

The treatment of End Stage Kidney Failure involves haemodialysis (using a kidney machine), peritoneal dialysis or kidney transplantation.

The type of treatment chosen is determined by the general health and medical condition of the person, by its impact on the person's lifestyle and by the person's personal preference.

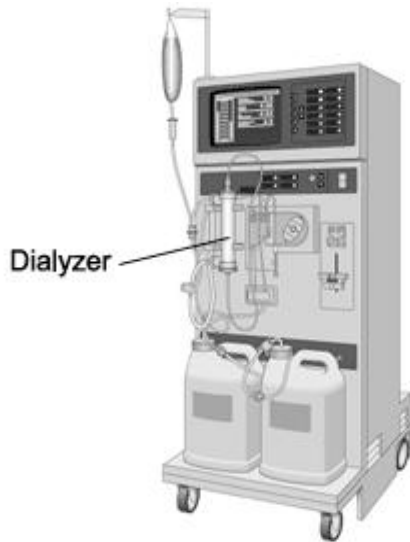
Many people may receive each one of these three forms of treatment at various times. What may be the best treatment for one person at one time might not be the best for another or for the same person at a different time.

6.3. Dialysis

Dialysis is a life-saving process that artificially replaces part of the functions of the kidney.

There are two types of dialysis: **haemodialysis** and **peritoneal dialysis**.

Haemodialysis involves removing blood from the body and filtering it in an artificial kidney (dialysis machine). The patient is connected by a tube to the dialysis machine, which continuously draws blood out, cleans it and removes excess fluid and then returns the blood back to the patient. Haemodialysis must be performed for 3 to 4 hours at least three times a week. It is usually performed at a dialysis centre, though home dialysis is also possible.



Peritoneal Dialysis is internal or in-body dialysis. Peritoneal dialysis entails use of a blood-cleansing solution called "dialysate" that is introduced into the peritoneal cavity, the region of the abdomen that is lined by the peritoneum. While in the peritoneal cavity, the dialysate works to extract toxins and excess fluids from the blood. After a period of time, the solution is then drained from the body cavity.

Three types of peritoneal dialysis are available.

1. Continuous Ambulatory Peritoneal Dialysis (CAPD)

CAPD requires no machine and can be done in any clean, well-lit place. With CAPD, your blood is always being cleaned. The dialysis solution passes from a plastic bag through the catheter and into your abdomen, where it stays for several hours with the catheter sealed. The time period that dialysis solution is in your abdomen is called the dwell time. Next, you drain the dialysis solution into an empty bag for disposal. You then refill your abdomen with fresh dialysis solution so the cleaning process can begin again. With CAPD, the dialysis solution stays in your abdomen for a dwell time of 4 to 6 hours, or more. The process of draining the used dialysis solution and replacing it with fresh solution takes about 30 to 40 minutes. Most people change the dialysis solution at least four times a day and sleep with solution in their abdomens at night. With CAPD, it's not necessary to wake up and perform dialysis tasks during the night.

2. Continuous Cycler-Assisted Peritoneal Dialysis (CCPD)

CCPD uses a machine called a cycler to fill and empty your abdomen three to five times during the night while you sleep. In the morning, you begin one exchange with a dwell time that lasts the entire day. You may do an additional exchange in the middle of the afternoon without the cycler to increase the amount of waste removed and to reduce the amount of fluid left behind in your body.

3. Combination of CAPD and CCPD

If you weigh more than 175 pounds or if your peritoneum filters wastes slowly, you may need a combination of CAPD and CCPD to get the right dialysis dose. For example, some people use a cyclor at night but also perform one exchange during the day. Others do four exchanges during the day and use a minicycler to perform one or more exchanges during the night. You'll work with your health care team to determine the best schedule for you.

6.4. Kidney Transplantation

A kidney transplant involves the taking of a kidney from the body of a healthy person or cadaver and implanting it surgically into the body of someone who has lost kidney function. The transplanted kidney can then perform the function of that person's own kidneys. A successful kidney transplant will allow you to have a better quality of life, improves lifestyle and will free you from dialysis treatments.

Whilst a transplant is not a cure for kidney failure, it does allow patients to live a more "normal" life than that experienced on dialysis. Patients with a well-functioning transplant have a greater sense of well-being and are able to enjoy a lifestyle free of dependence on dialysis treatments, although they must continue with their transplant drug treatment.

A transplant can mean improvement in anaemia, bone disease and in children, body growth. It also offers freedom from previous dietary and/or fluid restrictions and from restrictions on time and mobility.

It is the treatment of choice for chronic kidney failure for those who are considered suitable candidates for a transplant. To find out if you are a candidate, your health care team will perform a series of tests as part of a complete medical assessment.

Many ESRD patients benefit greatly from a kidney transplant. After successful transplantation, patients no longer require dialysis. Today there are many patients on waiting list to receive a kidney transplant. The development of effective anti-rejection drugs means that the prognosis for five-year survival for most of these patients is high.

To avoid rejection, the best possible source of kidney donation is a close relative whose blood and tissue type match the patient's. Donated organs from cadavers also have high success rates. A growing source of kidneys for transplantation comes from living donors who are not blood relatives, but with whom the patient has an emotional tie, such as a spouse, friend or co-worker.