An Introduction to Peritoneal Dialysis

Kidney Health Australia

Prevent, Detect, Support, Research.
Contents

Foreword 3
What are kidneys? 4
Dialysis 7
What support is available? 24
How do I make the choice? 26
What if I am struggling to cope? 30
What does that word mean? 31
Where can I get more information? 34

Acknowledgements:
This booklet was produced by Kidney Health Australia in collaboration with the Royal North Shore Hospital. The reprinting of this resource has been supported by Fresenius Medical Care.

An Introduction to Peritoneal Dialysis

Copyright:
This publication is copyright. Apart from any use as permitted under the Copyright Act 1968, no part may be reproduced without written permission from Kidney Health Australia. Requests and enquiries concerning reproduction and rights should be directed to Kidney Health Australia, PO Box 9993, Melbourne VIC 3001 or email info@kidney.org.au

Disclaimer:
Always consult your doctor before beginning any health treatment. This booklet is intended as a general introduction to the topic and should not be seen as a substitute for your doctor’s or other health professional’s advice. All care is taken to ensure that the information contained in this booklet is accurate at the time of publication.
An Introduction to Peritoneal Dialysis is designed specifically for people who are considering treatment options for kidney disease.

If you are reading this for the first time, it may be that you have just received the news that you need to consider kidney disease treatment options. You may also have had CKD for sometime and be ready to learn more, or you may be supporting a loved one in this situation.

An Introduction to Peritoneal Dialysis is designed to provide you with information about peritoneal dialysis as a kidney disease treatment option. Other booklets in this series cover home dialysis, haemodialysis, transplantation, and comprehensive conservative care. We encourage you to read all the booklets so you can make an informed decision about your treatment.

Kidney Health Australia is here to support you throughout your journey. Our fully qualified team of nurses and allied health professionals are only a phone call away should you wish to speak to someone confidentially.

Welcome to Australia’s kidney community and please keep in touch so that we may be able to provide you with whatever support and assistance you require.

To receive monthly updates on the latest in the kidney community and managing your kidney health visit kidney.org.au/subscribe

The Kidney Health Australia team 1800 454 363 kidney.helpline@kidney.org.au kidney.org.au
What are kidneys?

Most people are born with two kidneys, each growing to the size of your fist. Your kidneys are bean shaped and are positioned near the middle of your back, on either side of your backbone (spine). Your kidneys are part of the body’s urinary system.

What do healthy kidneys do?

Kidneys are the unsung heroes of the body. The kidneys play a number of important roles in the body, such as:

- Extracting excess fluid to make urine (wee)
- Controlling blood pressure
- Filtering waste products from the blood
- Controlling body fluids
- Stimulating the production of red blood cells
- Controlling potassium, calcium and phosphorus levels
- Regulating vitamin D.

What happens when the kidneys don’t work properly?

Sometimes kidney function can change quickly. For example, your kidneys may stop working properly because of a sudden loss of large amounts of blood (e.g. during surgery) or as a result of an accident, illness or infection.

A sudden change in kidney function is called acute kidney injury. This is often temporary but can occasionally lead to lasting kidney damage. More often, kidney function worsens over a number of years – it is a chronic, or ongoing, condition. Chronic kidney disease (also referred to as CKD) is called a silent disease as there are often no warning signs. Sometimes people lose up to 90 per cent of their kidney function before getting any symptoms.
Symptoms you may experience

- Retention of fluid causing breathlessness and swelling
- Tiredness
- Headaches
- Poor memory and concentration
- Irritability
- Sleep disturbances
- Feeling washed out
- Itchiness
- Nausea and loss of appetite
- Weight loss
- Altered sexual function.

Dialysis is started when you no longer feel well enough to live your usual life, have excess fluid or swelling, or your blood results show levels of waste that are becoming dangerous to your health.
You are not alone

In Australia:

• Over 3,000 people start dialysis or receive a transplant every year
• There are currently over 25,000 people in Australia on dialysis or living with a transplant.

Out of every 10 people needing treatment for kidney disease the causes are:

- Diabetes
- High blood pressure
- Nephritis
- Polycystic kidney disease
- Other
Dialysis

When you have kidney failure your body cannot get rid of extra water and waste products. Dialysis is simply the cleansing of your blood, which is part of the work that your kidneys usually do for you.

Dialysis must be performed for the rest of your life or until you receive a kidney transplant. If your kidney transplant is successful, dialysis is no longer needed, but can be restarted if the transplanted kidney begins to fail.

There are two different types of dialysis: haemodialysis and peritoneal dialysis. Both do the work of your kidneys, but in a different way.

During haemodialysis, needles are used to access your blood. Your blood is taken via tubing through a special filter which cleans your blood. It is then returned clean to your body.

Peritoneal dialysis (PD) works using your body’s peritoneal membrane as a filter. PD is performed throughout the day using manual bags or at night using a machine. This form of dialysis is very gentle on your body, and it can protect your remaining kidney function. PD is also able to be successfully incorporated into most lifestyles.
Kidney Health Australia

Peritoneal dialysis (PD) is the oldest form of dialysis, and was first used in 1923. In Australia, approximately 20 per cent of all people on dialysis use PD.

PD works inside the body using your natural peritoneal membrane which allows impurities to be drawn out of the blood. The peritoneal membrane lines your abdominal (peritoneal) cavity, and covers organs such as your stomach, liver, spleen and intestines. The peritoneal membrane (also called the peritoneum) is semi-permeable. This means that it naturally allows some substances to pass through, but not others.

For PD to work there has to be permanent access to the peritoneal cavity. This is achieved by a soft tube (called a peritoneal catheter) which extends through a small incision in the tummy and into the peritoneal cavity.

The insertion of the peritoneal catheter requires a short hospital admission. The catheter provides a pathway through which dialysis solution (dialysate) can be placed into the peritoneal cavity. Dialysate is a liquid that usually contains glucose (a type of sugar) and substances that are similar to those in your blood.

Once the dialysate is inside the peritoneal cavity, the cavity acts as a reservoir holding the dialysis solution. Your body's waste products pass from your bloodstream across the peritoneal membrane and into the dialysate. After a set number of hours, the used dialysate, with the impurities from your blood, is drained from the peritoneal cavity and replaced with fresh solution. The process then commences again.
The basic PD cycle (exchange)

The PD cycle once established is: drain, fill, dwell. Each time this cycle is repeated, it is called ‘an exchange’.

**Drain:** First you connect your tube to the PD set and drain out the old dialysate which has been in the peritoneal cavity for the prescribed length of time (often 4-8 hours).

**Fill:** Your peritoneal cavity is filled with the new dialysate.

**Dwell:** You disconnect from the tubing and bags. The dialysate remains in your cavity for a period of time. Waste and extra fluids are drawn out of the blood vessels and through your peritoneal membrane into the dialysate during this time.
The basic PD cycle (continued)

At the start of each exchange, you will carefully connect your catheter with a tubing set that includes a bag of new dialysate and a drain bag. The connecting tubing set, and bags for the new and old solution (dialysate) are only connected when the dialysate is being changed. In between these exchanges, the catheter and a small ‘extension’ tube at the end of it are the only visible parts and are taped gently against your tummy.

This is the basic PD cycle. Later in this booklet you will read about two different types of PD. One type involves doing four cycles like this during the day. The other type of PD uses a machine to do the cycles for you while you sleep.
How peritoneal dialysis affects your body

During PD the average adult comfortably holds 2-3 litres of dialysis solution in their peritoneal cavity. Although this seems to be a large amount of fluid to hold in your abdomen, little or no discomfort should be experienced. The fluid moves between the two layers of the peritoneum, which results in only a minor increase in the width of your waist. You may initially be aware of the extra fluid, but this feeling will decrease over time. In children the volumes are much smaller and tailored to the size of the child.

The peritoneal catheter is your access for dialysis. It is permanent and is about 30cm long. The point at which the peritoneal catheter leaves your abdomen is called the exit site. It is important that the exit site is kept clean to prevent infection. You will be shown how to check and clean your exit site every day. The catheter will be securely taped to keep it in position and prevent it from moving around.
Different types of peritoneal dialysis

There are two different ways of doing PD, which suit different lifestyles. The two types of PD are known as **Continuous Ambulatory Peritoneal Dialysis** and **Automated Peritoneal Dialysis**.

**Continuous Ambulatory Peritoneal Dialysis (CAPD)**

With CAPD you always have dialysate in your body so your blood is constantly being cleaned. Usually four exchanges are done each day. Each exchange takes about 30-45 minutes and can be done almost anywhere, with a few sensible precautions. In between exchanges you are free to go about your daily activities. Overnight you have a long dwell while you sleep. Exchanges are typically done on waking, at lunch time, at dinner-time and prior to going to bed. Some flexibility is available for busy days.

CAPD works by gravity. When the drain bag is placed at floor level the fluid drains out. By raising the new dialysate bag above shoulder level, the new dialysate flows into your peritoneal cavity.

Dedicated space to perform PD bag exchanges
Automated Peritoneal Dialysis (APD)

During APD a machine called a cycler automatically does the exchanges for you. Each night your catheter is attached to the tubing of the cycler. It does several exchanges, moving the clean and used dialysate in and out of your body while you are asleep. APD is done every night and usually takes between 8–10 hours.

You are connected to the machine during this entire process. During the day some dialysate is usually left in your body so that dialysis continues. In the evening the dialysate is drained out automatically by the cycler.
Peritoneal dialysis for children

PD is often the preferred treatment for children. As for adults, the choice between PD and haemodialysis for children is based on many factors including the child’s needs, the environmental and social aspects of the child’s lifestyle, availability of the service and the clinical condition of the child.

Most children are able to use APD overnight, leaving their daytime hours free. The volume of dialysis solution depends on the weight of the child. Infants may only require 0.5 Litre (500 mL), while teenagers may need 1.5-2 Litres of dialysis solution.

Children on PD are able to enjoy a relatively uninterrupted and active lifestyle, participating in varied sports and activities.
Learning to do peritoneal dialysis

Once the exit site of the catheter is healed (which usually takes a couple of weeks) you can train to do the PD exchanges at home. Specialised nurses at the training centres will organise training dates and times with you. Good training is important to make sure you can do the dialysis safely. You should allow one week to focus on training. The training is done at the home dialysis training centre nearest to you. Another person can do some training with you if they will be supporting you at home.

During training you will learn to:
- Perform the exchanges
- Care for your exit site
- Manage your general health
- Manage any problems with the dialysis
- Order and look after your supplies.

Your PD supplies will be delivered once a month into the storage space that you choose. You will need a space about the size of a double wardrobe to fit your boxes of dialysis fluid and equipment. You may also wish to speak to your local council to request an additional bin to manage the extra household waste associated with PD.
Ongoing care

The home dialysis training staff will continue to monitor your PD treatment. They will be available for any problems, and will see you regularly either at clinics or in your own home.

**Line changes**
The line (extension tube) attached to your catheter is changed every six months. This is usually done by the PD nurse using sterile techniques. It is important that the line is changed regularly as the plastic materials may become worn with time and collect germs.

**Clinic visits**
Once you have completed PD training you will be expected to attend the PD unit at regular intervals (usually every 3 months). This is necessary in order to monitor how your dialysis treatment is progressing.

**Seeing your kidney specialist**
Your kidney specialist (Nephrologist) will see you regularly. Timing this with your PD clinic visit is a good idea. The doctor will review your progress and make any necessary adjustments to your dialysis treatment. Take this opportunity to discuss any difficulties you may be experiencing.

**Out of hours support**
Most units have a 24-hour phone line that you can call if you need help or support urgently.
Peritonitis

Peritonitis is an infection of the peritoneal membrane, caused by the introduction of germs into the peritoneal cavity. It is the most common complication of PD, and on average occurs once every two years. It is possible to reduce the risk of peritonitis with simple techniques such as careful handwashing.

Signs and symptoms of peritonitis

• Cloudy dialysis solution
• General abdominal tenderness, which can be severe and occur quickly
• Nausea and/or vomiting, diarrhoea
• Fever
• General feeling of being unwell.

Treatment for peritonitis

The most important part of treatment is to seek medical advice immediately, even if it is the middle of the night. Peritoneal infections can worsen quickly.

As for all types of infections, antibiotics play the major role in peritonitis treatment. The antibiotics required to treat the infection will be put in your PD solution. The duration of antibiotic treatment will depend on the type of germ and how severe the infection is. You will be closely monitored by your doctor during an episode of peritonitis.

Peritonitis is often preventable!

You will be taught how to prevent peritonitis as part of your PD training and education. By closely following what you have been taught, your chances of peritonitis will be dramatically reduced.
How will peritoneal dialysis affect my lifestyle?

Levels of activity and lifestyle choices vary across stages of life and from person to person. What is important to you may be less important to other people. You may work, be retired, travel, play sport or have a family to care for.

The impact of PD on your lifestyle is one of the issues covered in the My Kidneys, My Choice decision aid available from our Choosing your treatment page at kidney.org.au/treatment

Diet and fluid
As PD provides continual dialysis most people do not need to change their diet and fluid intake to keep their blood chemistry normal. You will be advised of any changes to your diet that are needed based on your blood results, your wellbeing and how well you are balancing your fluid levels in your body.

Medications
When your kidneys stop working, medications play a vital role in helping your body stay in balance. It is usual for most medications to have two names; one name is the approved pharmaceutical name that can sometimes be difficult to say and spell. The other is the brand name, which is the name that the pharmaceutical company uses to promote its brand.

When you have kidney disease it is common to have to take tablets to control your blood pressure. Different types of blood pressure tablets work in different ways so it is not unusual for more than one type to be prescribed. The dose may also alter from time to time according to your blood pressure. If you were on blood pressure tablets before you started PD they will usually continue, especially if they are the type that protect your remaining kidney function.

See Resources on Page 23 for further information.
You may also need to take a medication called a **phosphate binder**. These medications help control the levels of phosphate and calcium in your body. Phosphate binders are tablets that need to be taken when you eat. They act like a sponge soaking up phosphate that is released from your food.

The hormone **erythropoietin** is often used to treat **anaemia**, which is common when you have kidney disease. Most people on haemodialysis usually need iron supplements as well, either as a tablet or a regular infusion during the dialysis treatment. Other medications may be needed to protect the health of your bones, to control your blood sugar and to lower your **cholesterol**.

Reduced kidney function, poor appetite, and changes to your diet can mean that some of your vitamins levels are low. Your healthcare team will let you know if you need to take extra vitamins. Some vitamins can be dangerous when you are on haemodialysis, so it is recommended that you do not take any vitamins without checking with your **doctor or pharmacist** first.

It's best to tell any doctor who is prescribing medications for you that you have kidney disease and are using PD. Some medications may need the dose adjusted, and some may need to be avoided. Taking medications as prescribed is one of the best things you can do to maintain your good health.
**Employment**

Your work routine (days and hours that you work) may play a large part in your decision about which form of dialysis will suit you best. People using PD can usually schedule their dialysis exchanges around work commitments or use APD and do the exchanges at night. Depending on your workplace and the type of work that you do, it may also be possible to do the PD exchanges during the day.

See **Resources** on Page 23 for further information.

**Finances**

If your ability to work changes, this may impact on your income and your household finances. See the **Finance and kidney disease** page at [kidney.org.au](http://kidney.org.au) for more information.

When you have PD at home there is no charge for your PD machine and supplies. These are delivered to your home once a month. Some people choose to buy special storage items to help organise their supplies, and you may notice that you use extra hand soap and paper towels.

Some prescription medications may also be needed for your PD. Some dialysis units assist with the cost of buying digital scales (to weigh yourself), a blood pressure machine and any other equipment or resources you may need. This does vary, so please check with your dialysis unit.
**Sport and exercise**

Continuing sport and exercise is encouraged for everyone on PD. With PD you have the flexibility to fit your dialysis routine around your exercise. If you play a contact sport, it is important to make sure your peritoneal catheter is protected. If you swim, you need to pay careful attention to the advice of your health care team about water quality and safety.

See **Resources** on Page 23 for further information.

**Sexuality and fertility**

Dealing with the health problems caused by kidney disease, and the treatments for it, can be difficult. It is easy to get caught up in the medical side and overlook the impact that kidney disease can have on your personal life and relationships.

Sexuality is more than just sex. It can be an important part of who you are, how you see yourself, how you express yourself, your sense of self-worth, and your sexual feelings for others. PD brings many physical changes that can affect how you feel about your body and your sexuality.

Accessing support for issues relating to your sexuality and or fertility will depend on the cause of the problem and your personal preferences.
Sexuality and fertility (continued)

It is important that you talk to someone who knows your health history and understands the medications that you are taking. Members of your health care team will understand, treat your conversations with respect and confidentiality, and offer treatment or referral to other specialists. Try to communicate your concerns with your partner so you can start to resolve the issues before they affect your relationship and life together.

Fertility can be affected by kidney disease. If you are considering becoming pregnant while on PD it is essential that you and your partner discuss this with your doctor. It is also important to talk to your health care team about birth control options while undergoing PD. Some types of the contraceptive pill may raise blood pressure.

Travel and holidays

With careful planning you can travel and go on holidays while on PD. It may involve making arrangements to have supplies sent to your destination. You will need to organise this before your trip, and you may have to pay some costs.

Pets

You can still own pets if you are on PD. It is strongly recommended that your pets are kept away from your PD supplies because they carry germs that can lead to peritonitis. It is also important to avoid being scratched or allowing your pet to make contact with your dialysis catheter. It is important to carry out good hand-washing after handling your pet.

See Resources on Page 23 for further information.
Resources

This booklet focuses on PD. For more information about other kidney disease treatment options (including home dialysis, haemodialysis, transplantation, and comprehensive conservative care), see the other booklets in this series available at kidney.org.au/resources

Kidney Health Australia offers a range of fact sheets and publications with useful diet advice and tips. For more information see kidney.org.au/resources

To read more about dialysis and work visit kidney.org.au/living-with-kidney-disease

For more information about sport and exercise see the Living with kidney disease page at kidney.org.au/living-with-kidney-disease

For more information and a range of factsheets on sexuality and fertility, please visit the Health and Wellbeing page at kidney.org.au/health-wellbeing

Kidney Health Australia has a range of fact sheets on travel and holidays. See the Travel and kidney disease page at kidney.org.au/travel

For more information about these and other topics, see the Peritoneal dialysis page at kidney.org.au/dialysis
What support is available?

There is a lot of support available for people who are using PD. The health care team and renal social worker in each dialysis unit are valuable sources of information.

Financial support
There are a number of options for financial support for all people on PD. Many of the payments are administered through Centrelink. Many social workers or local councils have access to free financial planners too. Please talk to someone if you are struggling financially.

Assisted transport schemes (regional and rural)
People in regional and rural areas who need to travel a long distance to the dialysis unit or to attend training sessions for PD may be eligible for financial support from the government.

Carer support
Carers are very special people, and at times they may need to be cared for too. Support for carers may be financial, personal, social, help at home, or opportunities to have a break (called respite).

It’s important to remember that if you are responsible for helping someone with their PD you can get tired and overwhelmed too. Ask for help when you need it, and accept any assistance that is offered. You need to stay healthy and happy to support your loved ones.
Resources

Kidney Health Australia has a range of fact sheets on this topic. See the Resources page at kidney.org.au/resources

There are also support groups specifically for carers. You can find out more from Carers Australia (carersaustralia.com.au or call 1800 242 636).

My Aged Care (myagedcare.gov.au) is a website set up by the Federal Government to provide access to a full range of services including support for carers.

You can find lots of useful information for families and carers at kidney.org.au/families-and-carers
How do I make the choice?

The choice between types of dialysis depends on factors such as your age, health and lifestyle. The benefits and drawbacks of each type need to be discussed with your health team and family. The best option is to choose a home modality of dialysis if you are able to. When starting PD, many people begin with CAPD and transfer to APD once their body is used to dialysis.

Unlike haemodialysis, PD provides continual dialysis. PD keeps pace with your body’s natural processes by cleansing your blood without any interruptions. This means that the levels of chemicals in your blood remain the same. As a result, people using PD rarely need to control their blood chemistry by changing their food or fluid intake. Continuous dialysis usually also results in improved feelings of good health and wellbeing.

Other things that people like about PD include:

- Freedom to travel with a bit of organisation
- Flexible dialysis in your own home
- Control over your lifestyle
- An easy technique that can be learnt by most people in one week
- A gentle dialysis that operates all day
- Most people have no diet restrictions and very few fluid restrictions.
However, there are issues with PD that also need to be considered:

- Inflammation of the peritoneal membrane usually caused by bacterial infection can lead to peritonitis. Careful hand washing and attention to detail with the dialysis procedure is the best prevention.

- PD can lead to higher cholesterol levels. Regular exercise and lipid lowering medications reduces this complication.

- You will need to stick to the PD schedule every day, although there is some flexibility for special occasions.

- The peritoneal membrane eventually may stop dialysing effectively meaning you may need to transfer to haemodialysis, but this can take several years.

Education is the first step to choosing what type of dialysis treatment you will have. Take advantage of the nurses and social workers who offer group and individual education sessions. Use booklets (like this one), Kidney Health Australia’s website kidney.org.au and other reputable sources of information, and consider talking to other people in the same position. Your health care team can offer advice on particular forms of dialysis suited to your individual needs, as well as provide reliable sources of information.
My Kidneys, My Choice is a useful decision aid that will help you to make your choice. It contains a check-list of issues that you should consider when making your choice. The decision aid is available in the resources section of Choosing your treatment page at kidney.org.au/treatment

Sometimes, due to medical or other reasons, it may be necessary to change from one form of dialysis to another. With PD, the success of the peritoneal membrane to work as a filter is different for everyone.

Even if your peritoneal membrane works well as a filter, it cannot do this forever. If you wish to continue to dialyse at home, after a few years you may need to change to home haemodialysis.

Your treatment choice is up to you. If you find your initial choice no longer suits you, it may be possible to change. Your health care team will be available to help.
Resources

Kidney Health Australia offers a range of resources to help you choose your treatment. For more information see the Choosing your treatment page at kidney.org.au/treatment.
What if I am struggling to cope?

It is normal to feel anger, despair, fear and many other emotions during the journey of kidney disease diagnosis and treatment. These feelings usually improve with time. If the impact of kidney disease is overwhelming you, it is important that you talk to someone.

The nurses, social worker or doctor at your renal unit are the best place to start. Social workers are employed in renal units to provide professional counselling to patients and their family members. They are very familiar with the issues you are experiencing. There is no need to feel embarrassed or ashamed or to suffer in silence.

You can also see your GP who can arrange a referral to a psychologist or social worker in your community. These services can be accessed through Medicare.

If you find yourself feeling low, please ask for help.

Resources

Organisations such as beyondblue (beyondblue.org.au or call 1300 22 4636) provide a confidential telephone information and advice helpline.

Visit the Mental health and kidney disease page of the Kidney Health Australia website kidney.org.au/mental-health
Chronic Kidney Disease (CKD)
A term used widely to describe kidney damage or reduced kidney function (irrespective of the cause) that persists for more than three months. Sometimes CKD leads to kidney failure, which requires dialysis or a kidney transplant to keep you alive.

Continuous Ambulatory Peritoneal Dialysis (CAPD)
A type of PD where a special fluid is put into the peritoneal cavity through a soft plastic tube, then drained out a few hours later. This is usually done three or four times each day. See also APD.

Automated Peritoneal Dialysis (APD)
A type of PD where a special fluid is put into the peritoneal cavity through a soft plastic tube, then drained out of your body continuously for a few hours by a machine, usually at night. See also CAPD.

Blood pressure
The pressure of the blood in the arteries as it is pumped around the body by the heart.

Cholesterol
A naturally-occurring waxy substance made by the body. It is an essential building block of cell membranes, hormones and vitamin D. Too much cholesterol in your blood can cause clogging of the arteries and lead to cardiovascular disease.

What does that word mean?

A
Abdomen
The part of your body between your chest and your hips.

Accredited Practising Dietitian
Accredited Practising Dietitians (APDs) have the qualifications and skills to provide expert nutrition and dietary advice.

Anaemia
When there are only a small number of red blood cells in the blood or the blood cells are not working properly. Red blood cells carry oxygen, so someone with anaemia can feel weak, tired and short of breath.

Automated Peritoneal Dialysis (APD)
A type of PD where a special fluid is put into the peritoneal cavity through a soft plastic tube, then drained out of your body continuously for a few hours by a machine, usually at night. See also CAPD.

B
Blood pressure
The pressure of the blood in the arteries as it is pumped around the body by the heart.

C
Cholesterol
A naturally-occurring waxy substance made by the body. It is an essential building block of cell membranes, hormones and vitamin D. Too much cholesterol in your blood can cause clogging of the arteries and lead to cardiovascular disease.
Estimated Glomerular Filtration Rate (eGFR)
Regarded as the best measure of how well the kidneys filter wastes from the blood.

Erythropoietin (EPO)
A hormone that is made by your kidneys that causes the bone marrow to make red blood cells. A lack of this hormone can cause anaemia.

Exit site
The point where the peritoneal catheter exits your abdomen.

Fistula
Produced when a vein and an artery in your arm or leg are joined together to make it easier to move blood in and out of your body during haemodialysis. Also known as an arterio-venous fistula.

General anaesthetic
Medications that are used to send you to sleep, so you’re unaware of surgery and don’t move or feel pain while it’s carried out.

General Practitioner (GP)
A doctor who treats acute and chronic illnesses and provides preventive care and health education to patients.

Haemodialysis
A treatment for kidney failure. Your blood is pumped through special tubing to a haemodialysis machine. The machine acts like a kidney, filtering waste products from the blood before returning it to your body.

Health care team
Living with kidney disease means that you will have contact with many health professionals. In addition to your nephrologist (kidney specialist), your health care team will also include renal nurses, a renal dietitian, renal social workers, your GP, and other health professionals depending on your circumstances.

Kidney transplant
A surgical procedure to place a kidney from a live or deceased donor into a person whose kidneys no longer function properly.

Kidneys
Most people have two kidneys, each about the size of an adult fist and weighing 150 grams. Inside each kidney there are about one million tiny units called nephrons. The nephrons are the part of the kidney that filters the blood. Each nephron is made up of a very small filter called a glomerulus. As blood passes through the nephron, water and waste products are removed. Most of the water returns to the blood and the waste products collect in the bladder then leave the body as urine (wee). Most kidney diseases attack the nephrons.
Local anaesthetic
Medications that numb a specific area of your body to prevent feeling pain (as compared to general anaesthetic, which applies to your whole body).

Nephrologist
A doctor who specialises in treating conditions of the kidney.

Peritoneal cavity
The space in your abdomen holding the intestines and other internal organs.

Peritoneal Dialysis (PD)
Treatment for kidney failure during which dialysis fluid is moved in and out of your peritoneal cavity to remove wastes and fluid from the blood.

Peritoneal membrane
The membrane that lines your peritoneal cavity and covers organs such as your stomach, liver, spleen, and intestines.

Peritonitis
An inflammation of the membrane which lines the inside of the abdomen.

Pharmacist
A person who is professionally qualified to prepare and dispense medicinal drugs. Also known as a chemist.

Phosphate binder
Medication that binds with the phosphate in your intestine causing some of the phosphate to be passed in the faeces (poo).

Renal
Another word for kidneys.

Renal Dietitian
A Dietitian experienced in kidney disease who can help develop an eating plan needed as part of the management of kidney disease.

Renal Nurse
Nurses who are trained in kidney disease treatments.

Renal social worker
Social workers who are trained in providing people with kidney disease and their families with the support needed to cope with kidney disease.

Respite
A short period of rest or relief.

Semi-permeable membrane
A thin lining that allows some things to pass through it, but blocks others.

Stethoscope
A medical instrument for listening to the action of your heart or breathing.

Urine
The name for excess fluid and waste products that are removed from your body by the kidneys. Commonly called wee.

Vascular access
Access to your blood stream for haemodialysis.
Where can I get more information?

This booklet contains information about peritoneal dialysis. Other booklets in this series cover home dialysis, haemodialysis, transplantation, and comprehensive conservative care. We encourage you to read all the booklets so you can make an informed decision about your treatment.

Resources
Visit kidney.org.au

If you want to read more, Kidney Health Australia’s publication ‘Living with Kidney Failure’ provides comprehensive information about all aspects of living with kidney disease.

Connect with Kidney Health Australia:
• Community Newsletter
• Social groups - Kidney club
• Facebook, Instagram, Twitter, LinkedIn and YouTube.

Kidney Helpline
1800 454 363
kidney.helpline@kidney.org.au

Free health information service for anyone requiring assistance with managing their kidney health, understanding their kidney disease diagnosis or information on Kidney Health Australia support programs.
As the peak body for kidney health in Australia, we strive to create a healthier community through increased awareness and early detection of kidney disease. We connect kidney patients to vital resources and services to help them manage their condition and improve their quality of life. We also support and foster advocacy and research to drive improvements in the diagnosis, management and eventual cure of kidney disease.

**Our support services**
- Educational resources on kidney health and kidney disease, covering diagnosis, treatment options and management
- Fact sheets, books and educational videos and apps about kidney disease
- A large range of self-management resources including recipe books and nutrition resources
- Renal unit locations guide
- Holiday dialysis bus
- Transplant housing
- Support groups
- Kidney Health Week – national kidney awareness week
- Community events and challenges
- Regular newsletters.

**Primary care education and resources**
- Free accredited face-to-face and online education for health professionals
- Accredited Quality Improvement activities
- CKD Ambassador program
- CKD management handbook and CKD-Go! app
- Educational videos
- Nephrology referral guidelines and downloadable referral letter templates
- eGFR calculator and resources
- Scientific reports and publications.