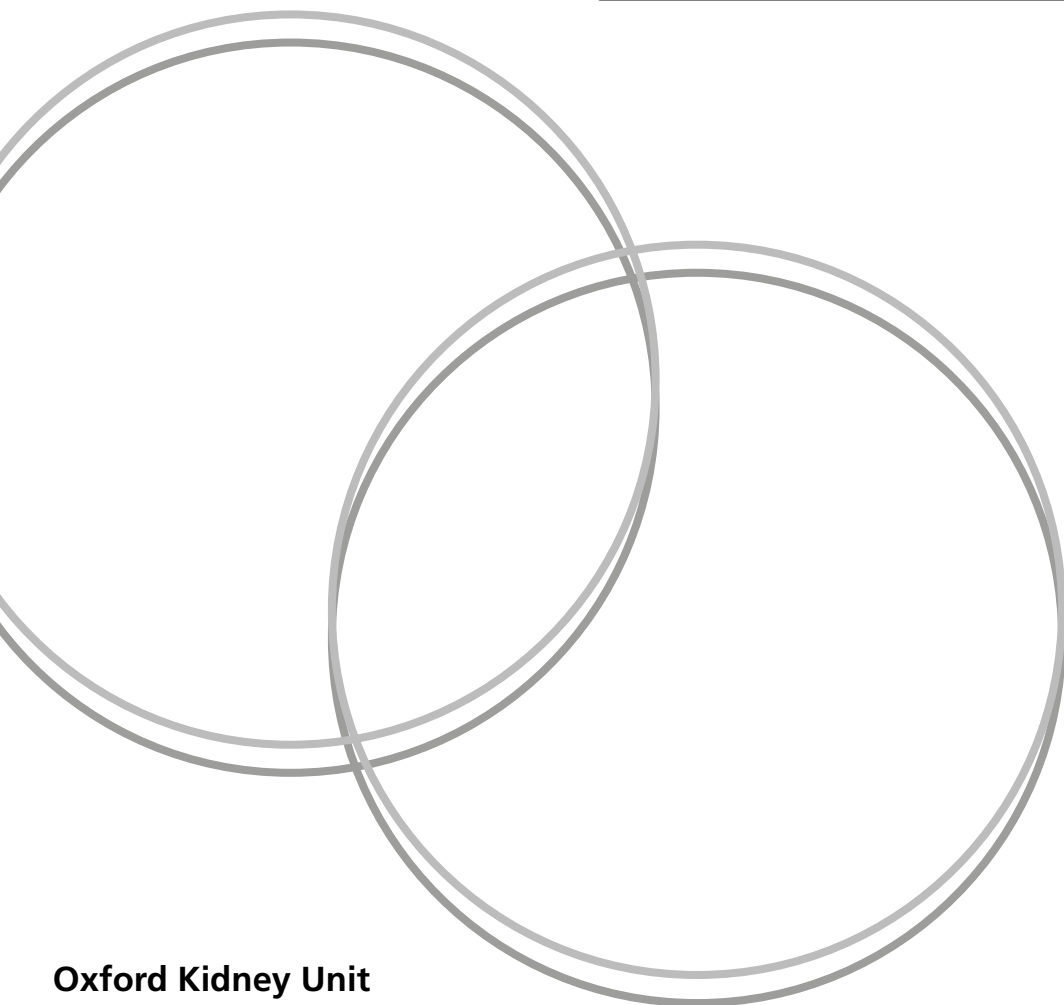


# Renal: Insertion of your Peritoneal Dialysis (PD) catheter

Information for patients



This leaflet will explain what happens when you have a peritoneal dialysis (PD) catheter inserted. If you have more questions after reading it, please talk to a peritoneal dialysis nurse or your kidney doctor.

## **Why do I need a PD catheter?**

You need a PD catheter so that you can have peritoneal dialysis.

You will need an operation or procedure to insert the PD catheter into your abdomen.

Your kidney doctor or peritoneal dialysis nurse will have discussed with you whether you need the procedure or the operation. If you have not had any abdominal operations and are not overweight, we will talk with you about a medical PD catheter insertion procedure.

You will usually need a surgical operation if you have had abdominal operations or are overweight.

A medical insertion is carried out under a local anaesthetic with x-ray guidance. Contrast solution (dye) is injected into the abdomen during the procedure to help check that the PD catheter is in the correct position. You will not be able to have a medical PD catheter insertion if you are allergic to shellfish or have had a reaction to contrast in the past.

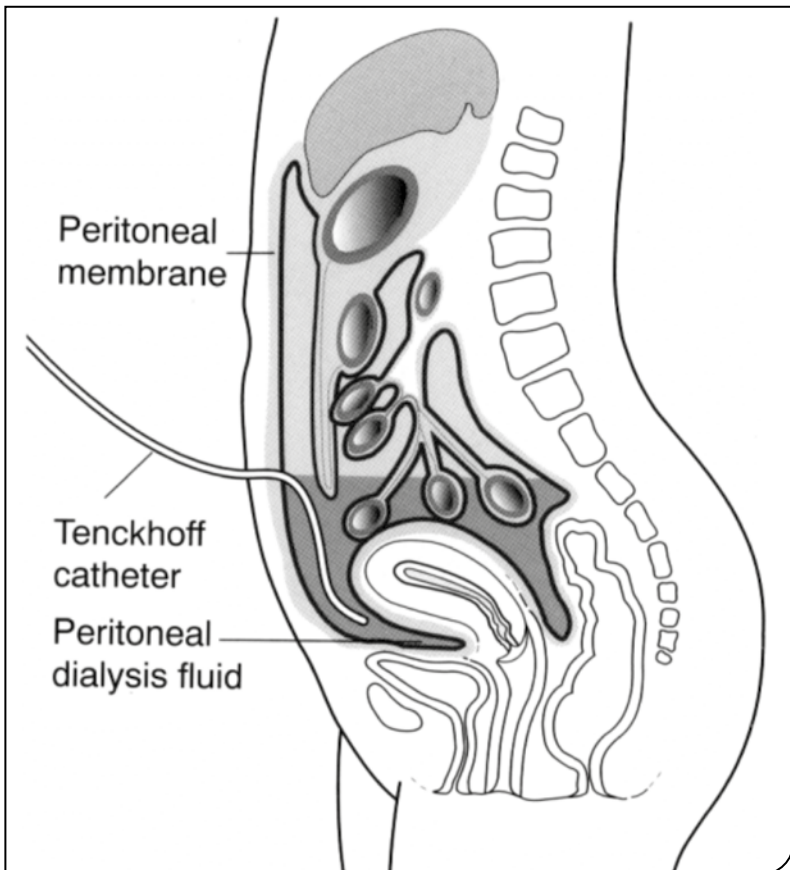
A surgical operation is usually carried out under a general anaesthetic.

About 2 weeks before the PD catheter insertion you will need to have a preoperative assessment. This is to make sure you are safe to have the PD catheter inserted and let you know how to prepare for the procedure or operation.

## What is a PD catheter?

A PD catheter (sometimes called a Tenckhoff catheter) is a special tube that is inserted into your abdominal cavity (space around the organs within your abdomen). The PD catheter is soft to touch and should feel quite comfortable against your body. Special cuffs help to keep the catheter inside your body (you won't be able to feel them); these also reduce the risk of infection.

If you need to start dialysis, some of the catheter is brought onto the outside of your abdomen. If you don't need to start dialysis yet and are preparing for PD in the future, the catheter can be left inside your abdomen. We will tell you more about this later in this leaflet.



## **How can I prepare for the operation or procedure?**

It is really important that your bowels are functioning well before you have a PD catheter inserted as there is a risk the catheter may not work.

2 weeks before the PD catheter insertion we will give you some laxatives.

You will need to take docusate sodium 200mg (2 tablets) in the morning, 100mg (1 tablet) in the afternoon and 200mg (2 tablets) in the evening or bedtime.

We will also give you leaflets on fibre and maintaining a healthy bowel when on PD. You can also contact a PD nurse or dietitian if you have any questions.

## **Medical PD catheter insertion**

On the day of the procedure you will be admitted to the Renal Day Case Unit at the Churchill Hospital.

A nurse will insert a small cannula into a vein in your arm or hand, so that we can give you some intravenous medications. These include:

- antibiotics
- paracetamol
- anti-sickness medication.

A kidney doctor will talk about the risks and side effects of the procedure and ask you to sign a consent form.

We will need to scan your bladder after you have passed urine. If there is still some urine in your bladder you may need a urinary catheter whilst we carry out the procedure.

After this you will be given some medication that may make you sleepy (sedation).

You will be taken to the procedure room on your bed.

In the procedure room we will transfer you to the procedure couch, you will need to lie flat with 1 or 2 pillows.

A nurse will attach you to a heart monitor, so we can measure your heart rate, blood pressure, oxygen saturation and respiration rate.

A kidney doctor will then administer a strong painkiller into the cannula.

You may wish to go to sleep, however we will talk to you about what we are doing.

We will then cover you in sterile dressings (over your chest, abdomen and top of your legs). It is really important that you keep your arms by your side.

Your abdomen will be cleaned with an antibacterial solution. Then the skin below your belly button will be injected with a local anaesthetic; this will sting for a few seconds and then make the area go numb.

A small cut, about 2 to 3cm in length, will be made on your skin in this area. The catheter will be inserted into your peritoneal cavity through this cut. This should not be painful, but you may feel some pushing and other peculiar sensations in your abdomen as the catheter is being put in. This is normal. If you do feel any pain, please tell the kidney doctor or nurse.

When the catheter is in position, a small amount of fluid will be flushed through it to check it is in the correct place. At the end of the procedure the kidney doctor will close the wound with some internal stitches and seal the outside of the wound with a waterproof glue. Sometimes there may be stitches on the outside of your abdomen. We will place a non-waterproof dressing where the catheter comes out of your abdomen.

The procedure takes about 45 minutes to an hour.

After the procedure you will need to rest in bed for 2 hours. You will need to stay in hospital for about 6 hours after you have had the PD catheter inserted. During this time a nurse will make sure you are comfortable, will check the site is not bleeding, and that you have passed urine and are eating and drinking normally. If you have a urinary catheter, this will be removed before you go home.

For information on what happens when you go home, please see page 10.

# Surgical PD catheter insertion

On the day of the operation you will be admitted to the Day Surgery Unit. This could be at the Churchill Hospital (Oxford) or The Foscote Hospital (Banbury). There are two different surgical operations for inserting a PD catheter. A surgeon will have suggested the operation that is best for you.

## **1. Laparoscopic insertion (keyhole surgery)**

2-3 small cuts will be made on your abdomen (each about 7-12mm in length). The surgeon will then use a laparoscopic camera (a very small camera at the end of a thin tube) to look into your abdomen, to see if there is any reason why it would be difficult to insert the PD catheter. They will also use the camera to help place the PD catheter into your abdominal cavity.

## **2. Mini laparotomy (open surgery)**

A small cut will be made 4-5cm below your belly button. The surgeon will insert the PD catheter into your abdominal cavity, through this opening.

In both the operations, fluid will be flushed in and out of your abdomen through the catheter, to make sure it is working. A waterproof glue will be used to cover the operation sites, apart from where the tube comes out of your abdomen; this will be covered with a non-waterproof dressing.

Both operations take about 30 to 40 minutes, with a further 6 hours in the Recovery Unit and Day Surgery Unit.

## Side effects of a PD catheter insertion

- The catheter can move into the wrong place inside your abdomen and the fluid will not drain in or out (this affects about 1 in 10 people). If this happens you may need a procedure or operation to replace it back into the correct position.
- Bruising at the operation site or across the abdomen. This is common and usually disappears after 2 to 3 weeks.
- Pain, most people will have some discomfort. The PD nurses will advise you to take paracetamol after the operation or procedure for a few days. It is very rare to experience severe pain. If you do have severe pain you will need to be seen in the hospital.
- Risk of developing an infection (affecting fewer than 1 in 150 people).
- Fluid may leak out of the operation sites (rare).
- Difficulty passing urine. This is usually due to a side effect of an anaesthetic. It is more common in men and older people. If you cannot pass urine you may need a catheter (small tube) inserted into your bladder to drain the urine. Sometimes this is needed for a few days. Your nurse will let you know what will happen if you need to go home with a urinary catheter.
- Bleeding, this is rare. If it does happen you will need to go to hospital for treatment. You may need another operation or a blood transfusion.
- Anaesthetic side effects, i.e. vomiting (rare).
- Bowel perforation, this is very rare but a serious complication that may require a surgical operation and a stay in hospital. It happens in fewer than 1 in 100 medical PD catheter insertions and fewer than 1 in 200 surgical operation insertions.

When the surgeon inserts the PD catheter they may notice something that may make PD difficult, such as adhesions (internal scarring). This can happen if you have had other operations in your abdomen.



Adhesions may cause difficulties with getting your PD working.

Unfortunately, there are some circumstances when a PD catheter will not work. This is not common and may be because you have had a previous operation on your abdomen. If this happens the PD team will let your consultant know and suggest you are referred for haemodialysis.

## **Embedded PD catheter**

If you don't need to start dialysis yet, you may be offered an embedded catheter. This is exactly the same process, but, instead of the catheter coming out of your abdomen, it is buried just under your skin (in a downward direction towards your groin).

The benefit of having an embedded catheter is that you can have your catheter inserted when you are feeling well and your kidney function is stable.

When you need to start PD you will have a small procedure to bring the end of the catheter out onto the outside of your abdomen (externalise). You can then start peritoneal dialysis within a few days of the catheter being externalised.

## Taking care at home

There may be some bruising on the skin of your abdomen, but this will soon disappear. The dressings must be kept dry, so avoid bathing and showering for at least 2 weeks after your operation.

Your dressings will be changed by a PD nurse every week for the first 2-3 weeks. This will be done at your local PD Unit. Please let us know if you need transport to and from the hospital.

A PD nurse will also talk with you about the best time to start your peritoneal dialysis treatment.

**Week 1** (about 5 to 7 days after your operation or procedure).

We will change all of your dressings, make sure you are healing well and recovering from your operation or procedure. You will be in the Unit about 40 minutes to 1 hour.

**Week 2** (about 12 to 14 days after your operation or procedure)

We will change all of your dressings. If everything has healed well we will teach you how to care for the exit site and advise you if you can start showering.

We will drain some dialysis fluid (about 1litre) in and out of your abdomen to make sure that it is flowing well. If you are using the overnight PD machine you will also need an APD (automated peritoneal dialysis) trial. This involves a short treatment on the machine so we can check that your catheter is working well.

You will be in the unit about 3 to 4 hours.

We will also provide you with information about starting PD and training at home date.

## **When will I start PD?**

Most people start PD about 3 to 4 weeks after their operation or procedure.

If your kidney function has declined suddenly or you are feeling sick and tired we may start PD earlier. This is usually done in the hospital as a day case 2 or 3 times each week. We can make sure the treatment is working well and that you are not experiencing any side effects.

PD training takes about 3 days, a nurse will be with you for about 6 hours per day. It is carried out in your home. You can also have a family member or friend with you.

Before you start PD we will give you more information on how to prepare for starting PD, we also have a leaflet that you can refer to.

## **Driving**

You should not drive for:

- 5 days after a laparoscopic insertion
- 2 weeks after a mini laparotomy
- at least 7 days after a medical insertion.

You may want to check with your insurance company when you are allowed to drive.

A way to tell whether you can drive safely is if you are able to perform an emergency stop comfortably. We suggest that you get into your car while it is parked, to see if you can perform an emergency stop by stamping on the brake. If you feel you don't want to do this and/or it hurts your abdomen, leave it for 2 days and try again.

## **Going back to work**

Most people are advised to take 7 days off work. If you have a manual job, you are more likely to need more time off. You must not lift any heavy items for 3 weeks.

## **Externalising your PD catheter**

This procedure is usually carried out in the Oxford PD Unit by a kidney doctor or surgeon. You will be in the Unit about 3 to 4 hours. You can drive on the day of the procedure and eat and drink as normal.

You will need to have a blood test about 2 weeks before the procedure to make sure your blood is clotting properly. This can be done in your local unit.

We will ask you to lie on a couch and exam your abdomen so we can decide which is the best place for the catheter to come outside of your body.

We will administer some intravenous antibiotics into a vein in your arm or hand. This reduces the risk of developing an infection after the procedure.

We will cover your abdomen with a sterile drape. You will need to keep your arms by your sides.

Your abdomen will be cleaned with an antibacterial solution. The skin around the area where the tube will come out of your abdomen will be injected with a local anaesthetic; this will sting at first but will then make the area go numb.

A small cut (3-4mm in length) will be made on the skin of your abdomen, so your catheter can be gently pulled out. It should not be painful but may be a little uncomfortable. Once it is out, the catheter will be flushed through, to make sure it is working.

The site where your catheter comes out of your abdomen will be covered with a dressing. The PD nurses will take care of the area for the first 2 weeks after the procedure. You will not be able to bathe or shower during this time.

## Contact details

### **Oxford PD unit**

Tel: **01865 225 792**

(8.00am to 6.00pm, Monday to Friday)

Email: **pd.team@ouh.nhs.uk** (between 8.30am and 4.30pm)

### **Wycombe PD unit**

Tel: **01494 426 349**

(8.00am to 6.00pm, Monday to Thursday)

### **Swindon PD unit**

Tel: **01793 605 288**

(8.00am to 6.00pm, Monday to Friday)

### **Milton Keynes PD unit**

Tel: **01908 996 495**

(8.00am to 4.00pm, Monday to Friday)

The PD nurses may be visiting people at home, so all units have an answerphone telling you who to contact if no one is available.

### **Renal Ward Churchill hospital**

Tel: **01865 225 780**

24 hours, including weekends and bank holidays

## Useful websites

### **Oxford Kidney Unit**

Lots of information about the Oxford Kidney Unit for patients and carers.

Website: [www.ouh.nhs.uk/oku](http://www.ouh.nhs.uk/oku)

### **Kidney Patient Guide**

Information for patients with kidney failure and those who care for them.

Website: [www.kidneypatientguide.org.uk](http://www.kidneypatientguide.org.uk)

### **Kidney Care UK**

A charity which has lots of practical support and information for people with kidney disease.

Website: [www.kidneycareuk.org](http://www.kidneycareuk.org)

### **Six Counties Kidney Patients Association**

The SCKPA is run for patients by patients or family members.

They offer support to people suffering from kidney disease or who are on dialysis. They work closely with the Oxford Kidney Unit and have branches in Oxfordshire, Northamptonshire, Buckinghamshire, and Milton Keynes, and parts of Wiltshire, Gloucestershire and Berkshire.

Website: [www.sixcountieskpa.org.uk](http://www.sixcountieskpa.org.uk)

### **National Kidney Federation**

A charity which has lots of practical support and information for people with kidney disease.

Website: [www.kidney.org.uk](http://www.kidney.org.uk)

## **Health for Me (patient portal)**

Health for Me enables you to access to your digital health record via the OUH Patient Portal. It is an online system so you can easily view parts of your digital health record safely and securely from a computer or smartphone. If your bloods are taken by the Oxford Kidney Unit you will be able to see these results. We can give you a leaflet that will help you understand the results. If you would like a copy please ask a member of the renal team.

Please ask a member of the renal team to sign you up to the patient portal.

## Further information

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

Authors: Jayne Woodhouse (Advanced Nurse Practitioner) and  
Udaya Udayaraj (Renal Consultant)

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Oxford University Hospitals NHS Foundation Trust

[www.ouh.nhs.uk/information](http://www.ouh.nhs.uk/information)



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