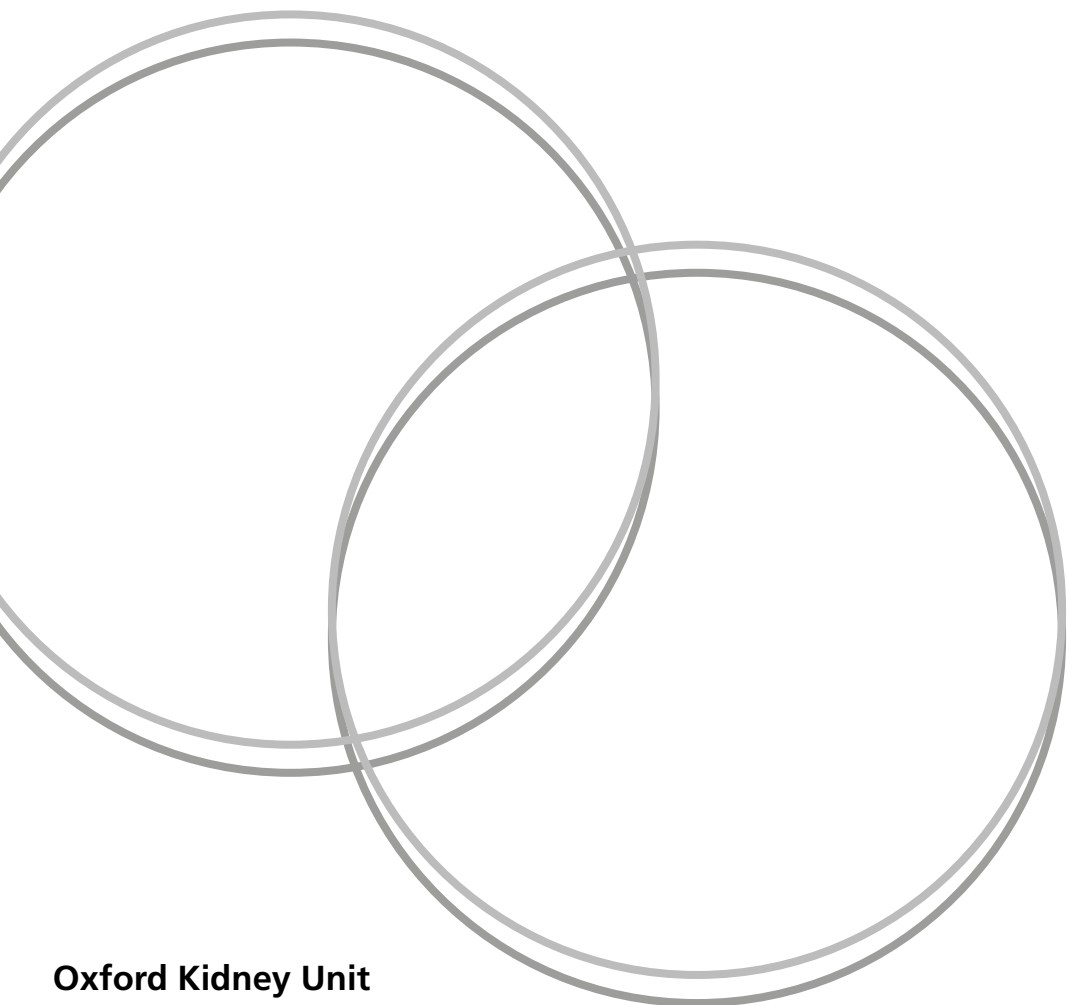


# Insertion of your Peritoneal Dialysis (PD) catheter

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 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 suggest that you have a medical PD catheter insertion procedure.

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

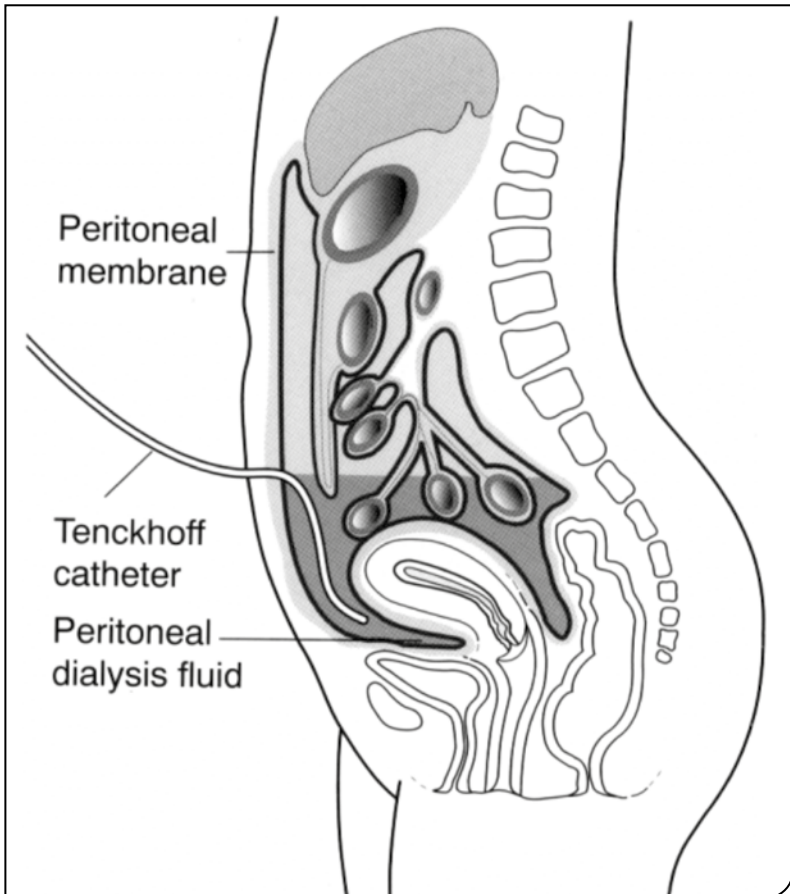
A medical insertion is carried out under a local anaesthetic and a surgical operation is usually carried out under a general anaesthetic.

The information in this leaflet will help you to decide which type of PD catheter insertion is right for you.

# 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 tummy). 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.



## **What happens during a medical PD catheter insertion procedure?**

You will be asked to go to the Renal Ward or Renal Day Case Unit. The procedure is carried out when you are awake. You will be given some antibiotics, a medicine to help you relax, strong painkillers and a local anaesthetic. You may also need a bladder scan to see if your bladder still has urine in it after you have been to the toilet. If it does, you may need a urinary catheter to help empty it. All of this will be discussed with you before the procedure. Once you are ready, you will go with a nurse to the procedure room. A kidney doctor will carry out the procedure.

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 consultant will close the cut with stitches, and your catheter exit site (where the tube comes out of your abdomen) will be covered with a dressing.

The procedure takes about 45 minutes to an hour.

After the procedure you will need to rest in bed for 1 to 2 hours. You will then be taken to the radiology department, so we can take an X-ray of your abdomen. This is to check the position of your PD catheter. You will need to stay in hospital for about 6 hours. 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 7.

# What happens during a surgical operation to insert a PD catheter?

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 spray 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 3 to 4 hours in the recovery unit.

## **What happens if I am having an embedded 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).

## **What do I need to do before the operation or procedure?**

You will need to have a pre-operative assessment in the Renal Unit. This is to check you are fit to have your operation or procedure.

During the pre-operative assessment you will have an ECG (test on your heart), a physical assessment, blood test and we will check your medications. We will also give you more information about your operation.

Please make sure you have a supply of paracetamol at home, ready for when you come out of hospital.

## **Items to bring into hospital with you**

- medications in their original packaging
- something to pass the time, such as a book, magazine or electronic reader/tablet
- an overnight bag with night clothes and toiletries (just in case you need to stay the night in hospital).

# **What happens on the day of the operation?**

You will be admitted to the Day Surgery Unit at the Churchill Hospital. A nurse, surgeon and anaesthetist will see you and a PD nurse will mark the position for the catheter on your abdomen. You will be asked to sign a consent form (if you have not done so already) and then your nurse will take you to theatre.

After the operation you will be taken to the recovery unit until you are fully awake. You will then return to the Day Surgery Unit. You should be able to go home 3-4 hours after your return to the Day Surgery Unit, but you must have a competent person who can stay with you to take care of you for 24 hours.

## **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.

When you are discharged you will be given a pack which contains some medication (laxatives) and dressings. We will give you advice on how to use these.

# 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.

## 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 patients). If this happens you may need another operation to replace it back into the proper position.
- There is a risk of developing an infection (affecting fewer than 1 in 150 patients).
- Fluid may leak out of the operation sites (rare).
- Difficulty passing urine. This is usually due to a side effect of an anaesthetic and abdominal surgery (affecting about 7 in 10 people). 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.



- 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. There are two different ways of receiving PD (CAPD or APD) and it may be that one type is better than the other, if you are having difficulties with PD. Your nurse will suggest which type of PD is best.

Unfortunately, there are some circumstances when your PD catheter may not work. This is not common and may be because you have had a previous operation on your abdomen. Most people have no problem during or after the operation or procedure and have a successful working PD catheter.

## **Externalising your PD catheter**

This procedure is usually carried out in the Oxford PD Unit by a surgeon or specialist nurse.

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.

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

You are likely to start PD 2-4 weeks after the operation or procedure. If your catheter has been externalised you can start PD straight away. This may be longer if you have had a hernia repair at the same time as the catheter insertion.

Learning to do your own PD treatment takes about 3 to 5 days. A PD nurse will come to your home and spend about 5-6 hours with you each day.

## **What else will I need before starting PD?**

Your PD nurse will give you a PD training booklet the first time you have your dressings changed. Before you start PD, please make sure you also have:

- a wipe clean tray (melamine)
- bathroom scales (digital, with measurements that go up in 0.2kg)
- a hook to hang up the dialysis bag, if you are going to learn CAPD. Your PD nurse will advise you where the best place for this is.
- a work top/cupboard if you are going to learn APD, for the APD machine
- space for your PD supplies. These will be delivered to your house before you start learning how to do your PD. You will need room for about 40 boxes, which are each about the size of a small microwave.

## **Further information**

If you have any further questions, please talk to your PD nurse or the PD nurses in Oxford.

## Contact details

### **Oxford PD unit**

01865 225 792

(8.00am to 6.00pm, Monday to Friday)

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

### **Wycombe PD unit**

01494 426 349

(8.00am to 6.00pm, Monday to Thursday)

### **Swindon PD unit**

01793 605 288

(8.00am to 6.00pm, Monday to Friday)

### **Milton Keynes PD unit**

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**

01865 225 780

24 hours, including weekends and bank holidays

## Useful websites

### **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)

### **Oxford Kidney Unit**

This website has information about Oxford Kidney Unit for patients and carers.

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

If you need an interpreter or would like this information leaflet in another format, such as Easy Read, large print, Braille, audio, electronically or another language, please speak to the department where you are being seen. You will find their contact details on your appointment letter.

*Making a difference across our hospitals*

charity@ouh.nhs.uk | 01865 743 444 | hospitalcharity.co.uk

OXFORD HOSPITALS CHARITY (REGISTERED CHARITY NUMBER 1175809)

**Oxford  
Hospitals  
Charity**

Author: Jayne Woodhouse (Advanced Nurse Practitioner) and  
Udaya Udayaraj (Renal Consultant)  
Reviewed at the clinical guidelines meeting, December 2018

February 2019

Review: February 2022

Oxford University Hospitals NHS Foundation Trust  
www.ouh.nhs.uk/information



OMI 48046P