

# Insertion of your peritoneal dialysis (PD) catheter

## Information for patients

This leaflet outlines what you can expect when having a peritoneal dialysis catheter inserted. If you have any further questions please speak to a peritoneal dialysis nurse or a member of the medical team.

### What is a peritoneal dialysis (PD) catheter?

A PD catheter is a special tube that is inserted into your abdominal cavity (the space within your tummy). One end of the tube rests inside the abdomen and the other end comes out through the skin over your tummy. This tube is used to put fluid into your abdomen and also to take fluid out of your abdomen.

Once inserted, PD catheters are usually quite comfortable and most people tolerate them very well. You will not be able to feel the part of the tube that is inside your abdomen. Two small cuffs are attached to the tube and these help to keep the PD catheter in the correct position. These cuffs sit underneath the skin and occasionally you may feel them, but they should not be uncomfortable.

### What is a peritoneal dialysis (PD) catheter used for?

A PD catheter is used to administer peritoneal dialysis. This is a form of **renal (kidney) replacement therapy**.

The kidneys play a major role in cleaning the blood in the body. Renal replacement therapy is when this function of the kidney is replaced by medical treatment, for example dialysis.

In peritoneal dialysis a special fluid called dialysate is put into your abdomen through your PD catheter. This fluid is later taken out of your abdomen, again through the PD catheter. The exchange of this fluid is **peritoneal dialysis**.

### How is a peritoneal dialysis (PD) catheter inserted?

To insert your PD catheter you will need to have an operation. This is usually performed as a day-case operation, meaning that you will come into hospital and go home on the same day.

The operation is usually performed under a general anaesthetic (which means you will be asleep). There are two ways of performing the operation; either through a cut in the abdomen (open operation) or through a laparoscopic (keyhole) operation.

Occasionally we may ask a specialist doctor (an interventional radiologist) to insert the catheter using x-rays to guide the procedure, but this is only if the first two options are not possible, for example if you are not well enough for a general anaesthetic.

A laparoscopic operation generally involves two or three small cuts (approx. 0.5-1cm) around your umbilicus (bellybutton). A laparoscopic camera is inserted into your abdomen and this allows the surgeon to place the end of the PD catheter in the correct position inside the abdomen.

The PD catheter is then tested to make sure that it functions properly. If the test is successful, the end of the tube that is not resting in your abdomen is tunnelled under the skin before coming out of the skin at a site close by. This tunnelling helps to avoid infections.

The operation takes approximately 60-90 minutes (including the anaesthetic time) with a further three to four hours in the recovery unit after the operation.

### **What happens before the operation?**

If peritoneal dialysis is a suitable option for you, you will be scheduled to have a PD catheter inserted, as described earlier. Before your surgery you may be invited to attend a pre-operative assessment clinic to check whether you are fit enough to have the operation.

If you are scheduled to attend a pre-operative assessment clinic you will likely have a blood test, ECG, physical assessment and a review of your current medications. A pre-operative assessment clinic is not necessary for all patients.

### **What should I bring with me on the day of my operation?**

- A list of all your medications and the doses
- Something to read or do while you are waiting
- An overnight bag with clothes and toiletries in case you are required to stay in hospital overnight

### **What to expect on the day of your peritoneal dialysis (PD) catheter insertion?**

When your operation is scheduled you will be given a date and time to come into the hospital.

Before the operation you will be seen by a member of the surgical team who will answer any questions you have about the procedure and they will ask you to sign a consent form. You will also be seen by a member of the anaesthetic team who will check that you are fit to have the procedure on the day. They will also be able to answer questions you have about having a general anaesthetic.

When the team are ready to begin your operation you will be taken to the operating theatre by a member of the nursing team. After the operation you will be observed in the recovery unit and then taken back to the day ward. An x-ray of the abdomen will be performed before you go home to check the position of the PD catheter. You should be able to go home three to four hours after the operation.

You will need someone to escort you home from the hospital and take care of you for 24 hours after your operation.

When you are discharged home you will be given some laxatives to take with you. You will be given instructions on how to take these.

### **What to expect after your peritoneal dialysis (PD) catheter is inserted?**

At the end of the operation, dressings will be put on your abdomen to protect the wounds and the external part of the PD catheter. If you have any concerns regarding your wounds, please call us using the contact details listed at the end of this leaflet.

The external parts of the PD catheter will need to be kept clean and dry for four weeks after the operation. **Please do not bathe or soak the dressings in the shower** as this increases the risk of infection. One week after the operation you will be seen by a specialist PD nurse in clinic who will change your dressings on a regular basis. **It is important that only the PD nurses change dressings and handles the newly inserted PD catheter.** They will also begin to educate you on the details of how to care for and manage your PD catheter and your peritoneal dialysis.

Most people tolerate the operation very well; however you may experience some pain after the operation. We advise you to have paracetamol which is available over the counter at any pharmacy if necessary. You will also be given some laxatives to take home, and your regular medication list will be updated to include these. These help to keep your bowels moving well, which helps the dialysis catheter to drain freely.

### **Driving**

You should not drive for at least five days after your operation but you may have to wait longer than this. You should only drive if you are able to manoeuvre safely and can make an emergency stop comfortably. Please check with your motor insurance company whether you are allowed to drive.

### **When can I return to work after having my PD catheter inserted?**

This will depend largely on how you feel and the nature of your work. Most people are advised to take seven days off work following the operation. If your job involves manual labour or heavy lifting you may need more time off. You must not do any heavy lifting or strenuous exercise for four weeks after the operation.

### **What are the side effects of a PD catheter insertion?**

Most people who have PD catheters inserted have no problems during or after the operation, however there are some potential risks when having a PD catheter inserted.

- The catheter can move into the wrong place inside your abdomen. If this happens fluid may not drain in or out of your abdomen. This happens in about 1 in 10 patients. If this happens you may need another procedure to put your PD catheter back into the correct position.
- There is a risk of developing an infection. This affects less than 1 in 150 patients.
- Fluid may leak out of the operation sites. This is rare.
- Difficulty passing urine can be a side effect of the anaesthetic and abdominal surgery. This usually resolves after some time, but if it persists you may need a

catheter, which is a small tube that is inserted into your bladder. This will allow urine to drain out of your bladder and this may be required to stay in for a few days.

- Nausea and vomiting can be a side effect of the anaesthetic. This is uncommon and medication can be given to control this if needed.
- Bowel perforation is when the wall of your intestine is damaged. This is a very rare but serious complication and it may require further surgery or a longer stay in hospital. This happens in less than 1 in 200 patients.
- In a small number of cases peritoneal dialysis does not work. If this is the case your medical team will work to fix the problem or look for an alternative way for you to have dialysis.

## Further information

### Kidney Care UK

[www.kidneycare.org](http://www.kidneycare.org)

A charity which provides support and information for patients with kidney disease

### Kidney Patient Guide

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

Information for patients with kidney failure and their carers

## Contact us

If you have further questions please speak to your medical team in the first instance as they will be best able to help you.

You can also contact our PD specialist nurses via their virtual clinic, Monday to Friday, 9.30am-4pm by telephone on **020 3758 2040** or email: [rf.renalpd@nhs.net](mailto:rf.renalpd@nhs.net).

## Out of hours for medical or continuous ambulatory peritoneal dialysis (CAPD) problems

10 South ward at the Royal Free Hospital: **020 7794 0500 ext 37049/35474**

## More information

For more information about the kidney service at the Royal Free London, please visit our website: [www.royalfree.nhs.uk/services/services-a-z/kidney-services/](http://www.royalfree.nhs.uk/services/services-a-z/kidney-services/)

## Your feedback

If you have any feedback on this leaflet or for a list of references for it, please email: [rf.communications@nhs.net](mailto:rf.communications@nhs.net)

## Alternative formats

This leaflet is also available in large print. If you need this leaflet in another format – for example Braille, a language other than English or audio – please speak to a member of staff.

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