



## ACCESS SURGERY for PERITONEAL DIALYSIS in KIDNEY FAILURE

Information about your procedure from  
The British Association of Urological Surgeons (BAUS)

This leaflet contains evidence-based information about your proposed urological procedure. We have consulted specialist surgeons during its preparation, so that it represents best practice in UK urology. You should use it in addition to any advice already given to you.



<http://rb.gy/doi14>

To view this leaflet online, scan the QR code (right) or type the short URL below it into your web browser:

### KEY POINTS

- Peritoneal dialysis is a relatively simple means of filtering waste substances from your blood using special dialysis fluid put into your abdominal (tummy) cavity
- Dialysis can be performed in your local Dialysis Centre or at home
- Leakage or blockage of the dialysis catheter may occur and require replacement of the catheter
- Infection in your abdominal cavity is rare but can be life-threatening and should be treated as a matter of urgency
- Peritoneal dialysis does not treat the underlying condition causing your chronic kidney failure

### What does this procedure involve?

Insertion, removal or change of a soft plastic tube placed into the abdominal (peritoneal) cavity for dialysis.

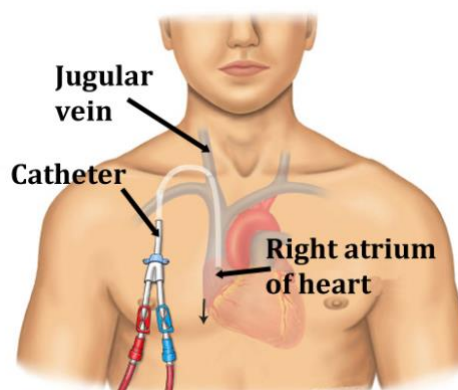
Peritoneal dialysis involves using your peritoneum (the membrane lining the tummy cavity) to clean your blood and remove excess fluid.

A special dialysis fluid is inserted into your abdominal cavity through a soft tube (Tenckhoff catheter).

Part of this catheter remains outside your abdomen so that the dialysis fluid bag can be attached.

## What are the alternatives?

- **A central venous dialysis line** (pictured) – using a large catheter put into your heart through a vein in your neck; often used as a temporary measure whilst waiting for a graft or fistula to mature
- **Medical treatment for kidney failure** – using drugs, fluid restriction & other dietary alterations to control your production of bodily waste products
- **Haemodialysis** – creating a fistula or loop graft to allow dialysis needles to be put into an arm or leg vein
- **Kidney transplantation** – using a healthy kidney (from a live or cadaveric donor) transplanted into your groin



## What happens on the day of the procedure?

Your urologist (or a member of their team) will briefly review your history and medications, and will discuss the surgery again with you to confirm your consent.

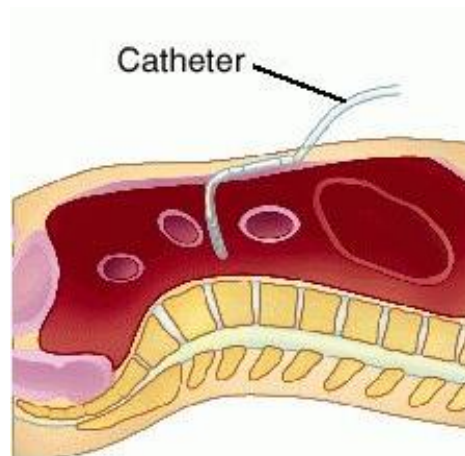
An anaesthetist will see you to discuss the options of a general anaesthetic or spinal anaesthetic. The anaesthetist will also discuss pain relief after the procedure with you.

We may provide you with a pair of TED stockings to wear, and we may give you an injection to thin your blood. These help to prevent blood clots from developing and passing into your lungs. Your medical team will decide whether you need to continue these after you go home.

## Details of the procedure

- we normally carry out the procedure under a general anaesthetic although local anaesthetic is sometimes used
- you will usually be given an injection of antibiotics before the procedure, after you have been checked for any allergies
- we make a small incision just above and to one side of your umbilicus (belly button)
- we put the catheter through the wall of your abdomen (tummy) at an angle so that one of the two cuffs (which help to keep it in place) lies just under your skin and the other lies within the abdominal wall itself (pictured below)

- we close the incision with absorbable sutures which usually disappear within two to three weeks
- we secure the catheter in place with tape, to prevent excessive movement whilst the cuffs “heal” into the tissues to anchor it firmly












We encourage you to mobilise as soon as possible and not to allow yourself to get constipated.

The dialysis nurses will flush your catheter to prevent any blockage and will repeat this on a weekly basis in their clinic.

### Are there any after-effects?

The possible after-effects and your risk of getting them are shown below. Some are self-limiting or reversible, but others are not. We have not listed very rare after-effects (occurring in less than 1 in 250 patients) individually. The impact of these after-effects can vary a lot from patient to patient; you should ask your surgeon’s advice about the risks and their impact on you as an individual:

After-effect	Risk
The procedure does not cure the underlying condition that is responsible for your kidney failure	 All patients
Your catheter fails to work	 Between 1 in 2 & 1 in 10 patients
Leakage of dialysis fluid around your catheter	 Between 1 in 2 & 1 in 10 patients
Infection of the skin and catheter requiring antibiotics	 Between 1 in 2 & 1 in 10 patients
Blockage of the catheter requiring removal (and possible replacement)	 Between 1 in 10 & 1 in 50 patients

Infection causing peritonitis which does not settle with antibiotics and requires catheter removal	 Between 1 in 10 & 1 in 50 patients
Hernia or bleeding at the catheter site	 Between 1 in 10 & 1 in 50 patients
Inadvertent injury to other organs during the procedure requiring further surgery	 Between 1 in 50 & 1 in 250 patients
Anaesthetic or cardiovascular problems possibly requiring intensive care (including chest infection, pulmonary embolus, stroke, deep vein thrombosis, heart attack and death)	 Between 1 in 50 & 1 in 250 patients (your anaesthetist can estimate your individual risk)

## What is my risk of a hospital-acquired infection?

Your risk of getting an infection in hospital is between 4 & 6%; this includes getting *MRSA* or a *Clostridium difficile* bowel infection. Individual hospitals may have different rates, and the medical staff can tell you the risk for your hospital. You have a higher risk if you have had:

- long-term drainage tubes (e.g. catheters);
- bladder removal;
- long hospital stays; or
- multiple hospital admissions.

## What can I expect when I get home?

- you will be given advice about your recovery at home
- you will be given a copy of your discharge summary and a copy will also be sent to your GP
- any antibiotics or other tablets you may need will be arranged & dispensed from the hospital pharmacy
- you should keep your catheter exit site covered with a clean dressing to protect it
- you should not bathe or shower until your catheter exit site has healed completely
- you should not lift any heavy items for at least six weeks
- you will need to attend the Dialysis Centre on a weekly basis to have your catheter flushed

- we will arrange a follow-up appointment, four weeks after the procedure, so we can teach you how to do your own dialysis treatment (this normally takes three to five days) and how to clean your catheter exit site
- we will arrange to deliver everything you need to carry out home dialysis
- if you develop an exit site infection, your specialist nurse will take a swab and may prescribe antibiotics

Once your catheter exit site has healed, you should cover it with a protective bag when bathing or swimming. Make sure your catheter is well-secured with tape or tube holders and try to prevent your clothing from rubbing or irritating the exit site.

**If your dialysis fluid becomes cloudy, or you have abdominal pain, you must contact the hospital immediately.** This may mean that infection has spread into your abdomen to cause peritonitis.

## **General information about surgical procedures**

### ***Before your procedure***

Please tell a member of the medical team if you have:

- an implanted foreign body (stent, joint replacement, pacemaker, heart valve, blood vessel graft);
- a regular prescription for a blood thinning agent (e.g. warfarin, aspirin, clopidogrel, rivaroxaban, dabigatran);
- a present or previous MRSA infection; or
- a high risk of variant-CJD (e.g. if you have had a corneal transplant, a neurosurgical dural transplant or human growth hormone treatment).

### ***Questions you may wish to ask***

If you wish to learn more about what will happen, you can find a list of suggested questions called "[Having An Operation](#)" on the website of the Royal College of Surgeons of England. You may also wish to ask your surgeon for his/her personal results and experience with this procedure.

### ***Before you go home***

We will tell you how the procedure went and you should:

- make sure you understand what has been done;
- ask the surgeon if everything went as planned;
- let the staff know if you have any discomfort;

- ask what you can (and cannot) do at home;
- make sure you know what happens next; and
- ask when you can return to normal activities.

We will give you advice about what to look out for when you get home. Your surgeon or nurse will also give you details of who to contact, and how to contact them, in the event of problems.

### ***Smoking and surgery***

Ideally, we would prefer you to stop smoking before any procedure. Smoking can worsen some urological conditions and makes complications more likely after surgery. For advice on stopping, you can:

- contact your GP;
- access your local [NHS Smoking Help Online](#); or
- ring the Smoke-Free National Helpline on **0300 123 1044**.

### ***Driving after surgery***

It is your responsibility to make sure you are fit to drive after any surgical procedure. You only need to [contact the DVLA](#) if your ability to drive is likely to be affected for more than three months. If it is, you should check with your insurance company before driving again.

## **What should I do with this information?**

Thank you for taking the trouble to read this information. Please let your urologist (or specialist nurse) know if you would like to have a copy for your own records. If you wish, the medical or nursing staff can also arrange to file a copy in your hospital notes.

## **What sources have we used to prepare this leaflet?**

This leaflet uses information from consensus panels and other evidence-based sources including:

- the [Department of Health \(England\)](#);
- the [Cochrane Collaboration](#);
- the [National Institute for Health and Care Excellence \(NICE\)](#);
- the [National Kidney Foundation](#); and
- the [Kidney Dialysis Information Centre](#)

It also follows style guidelines from:

- the [Royal National Institute for Blind People \(RNIB\)](#);
- the [Information Standard](#);
- the [Patient Information Forum](#); and

- the [Plain English Campaign](#).

### **DISCLAIMER**

Whilst we have made every effort to give accurate information, there may still be errors or omissions in this leaflet. BAUS cannot accept responsibility for any loss from action taken (or not taken) as a result of this information.

**PLEASE NOTE:** the staff at BAUS are not medically trained, and are unable to answer questions about the information provided in this leaflet. If you have any questions, you should contact your Urologist, Specialist Nurse or GP in the first instance.