

**Patient
Information**

Insertion of a tunnelled dialysis catheter (haemodialysis line)

Introduction

This leaflet provides information for renal patients and answers some of the commonly asked questions about having a tunnelled dialysis catheter. It also explains the benefits and risks of the procedure.

What is a tunnelled dialysis catheter?

Dialysis is a process for removing waste and extra water from the blood when your kidneys no longer do this for you. A tunnelled dialysis catheter (also known as haemodialysis line) allows blood from you to be taken to the dialysis machine cleaned and returned to you. Using a haemodialysis line is just one way of doing this and it can be used for dialysis the same day it is inserted. The catheter should only be considered short term while waiting for definitive access but it can be used for a few months if necessary.

Why do I need a tunnelled dialysis catheter?

Your doctor is aware you need dialysis treatment and considers a haemodialysis line is the best treatment option for you.

Who will be carrying out the procedure?

An experienced doctor, nurse or radiologist who is skilled in carrying out the procedure will insert the catheter.

The procedure will take place in the special procedures room on ward 7B or in the main theatres at Gloucestershire Royal Hospital. Sometimes it may be necessary to carry out this procedure in the X-ray Department at Gloucestershire Hospitals NHS Trust under the guidance of the radiologist.

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Department
Renal Services

Review due
July 2028

**Patient
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Usually, you will be asked to attend Ward 7b on the day of your procedure. In some circumstances, you may be asked to attend the imaging department (X-ray) at Gloucestershire Royal Hospital.

Giving your consent (permission)

We want to involve you in all decisions about your care and treatment. You will be asked to sign a consent form stating that you have agreed to the treatment and that you understand the benefits and risks of the procedure. It is your decision; you can change your mind at any time, even if you have signed the consent form.

Is there an alternative treatment?

There is no alternative to this procedure. However, it may be possible for the vascular surgeons to create an AV fistula for dialysis in the near future. If needed, full details of this procedure will be given to you during your vascular surgical outpatient appointment.

Do I need to do anything to prepare for the procedure?

If you are taking blood thinning medications such as clopidogrel, aspirin, apixaban, rivaroxaban, prasugrel, apixaban, warfarin or ticagrelor please discuss this with your doctor before attending for the procedure. You will need to stop taking these medications for a few days before the procedure. You will be asked to use a daily antibacterial skin wash before the procedure. A blood test may be required prior to the procedure to check your blood levels.

What happens during the procedure?

You will be asked to lie on a bed as flat as you comfortably can. You will have a monitoring device attached to your arm and finger. This will monitor your blood pressure, pulse and the oxygen levels in your blood.

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This monitoring device will also monitor your heart rhythm during the procedure. You may be given oxygen via a face mask.

The doctor or nurse will wear a sterile gown, gloves and mask. Your chest and neck will be cleaned with antiseptic. This will feel cold on your skin. Most of your body will be covered with a theatre towel.

The doctor or nurse will use an ultrasound machine to find exactly where the veins are in the side of your neck. The skin and deeper tissues will be numbed with local anaesthetic, this will sting slightly as it is injected.

Once the skin is numb, a needle will be inserted in to your vein, the ultra sound machine is used to make sure that the needle is correctly positioned. A guidewire is then passed through the needle and into your neck vein. The tip of the catheter is tunnelled under the skin just below your collar bone and into the vein then gently moved onwards into a bigger vein in your chest. This is a vein that takes blood to the heart. You may feel a pushing and pulling sensation as the line is placed in the vein.

A few stitches will be needed in your neck to hold the catheter in place. These stitches will be taken out by the dialysis nurse after 7 to 10 days. The stitches holding the catheter to the skin on the chest area in 4 to 6 weeks. An antibacterial dressing will then be placed over the site.

Will the procedure hurt?

The local anaesthetic injection stings to begin with, but this quickly wears off and the area soon feels numb. You will feel a mild pressure when the catheter is being moved, but will not hurt. After the procedure, your shoulder and the side of your neck may feel bruised. Any discomfort will be reduced taking pain relief medication such as paracetamol.

How long will the procedure take?

The whole procedure usually takes 60 to 90 minutes, but this varies from patient to patient. As a guide you should expect to be in the hospital for at least 6 hours.

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Nurses will carry out routine observations including your blood pressure, pulse and temperature. They will also look at the point where the catheter was inserted to check for any excessive bleeding.

About an hour after the procedure has been completed you will be taken to have a chest X-ray. This is to make sure that the catheter is in the correct position and that there are no problems before you start dialysis.

Your first two-hour dialysis session will be provided on Ward 7b. You will then be allocated sessions in one of the satellite units.

Possible risks of having a tunnelled dialysis catheter?

The common risks of the procedure include:

- bleeding from the puncture site and the small skin wound where the catheter comes out. This is not dangerous and can be stopped by pressing on the area
- bruising and swelling around the puncture site
- pain at the puncture site that is not improved by your usual pain relief

Very rarely, the lung or another blood vessel may be punctured. If this happens, a blood transfusion or a tube to drain the air from around the lung may be needed. Everything is done to reduce the risk of this and the chance of experiencing one of these serious complications is small (less than 1 in every 100 cases).

Once the catheter is successfully in place, the main complications will be a blockage of the catheter by a blood clot or infection.

If you experience any of the symptoms above, please contact Ward 7b or contact your local Emergency Department.

We hope that you have found this information leaflet helpful. Please remember that you are free to ask the doctor or nurse inserting the catheter as many questions as you like.

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If you would like further advice before or after the procedure, please contact a member of staff on Ward 7b.

Ward 7b

Gloucestershire Royal Hospital
Tel: 0300 422 6768 (24 hours)

Access Nurse

Gloucestershire Royal Hospital
Tel: 0300 422 6270
Monday to Friday, 8:00am to 4:00pm

If you would like to discuss the procedure further with your renal doctors, they can be reached via their secretary on the number below. Please note you may be asked to leave a message on the answering service:

Secretary to Dr Jim Moriarty

Tel: 0300 422 8298
Monday to Friday, 8:00am to 4:00pm

Secretary to Dr Su Jenkin/ Dr Arvind Singh

Tel: 0300 422 6299
Monday to Friday, 8:00am to 4:00pm

**Secretary to Dr Preetham Boddana/ Dr Fahad Bashir/
Dr Emma Wylie**

Tel: 0300 422 6762
Monday to Friday, 8:00am to 4:00pm

Secretary to Dr Iain Smith/ Dr Adarsh Babu

Tel: 0300 422 6297
Monday to Friday, 8:00am to 4:00pm

Further information**British Kidney Patient Association (BKPA)**

3 The Windmills St. Mary's Close Turk Street
Alton
GU34 1EF

Tel: 01420 541 424

Website: www.britishkidney-pa.co.uk

E-mail: info@britishkidney-pa.co.uk

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Making a choice

Shared Decision Making

If you are asked to make a choice, you may have lots of questions that you want to ask. You may also want to talk over your options with your family or friends. It can help to write a list of the questions you want answered and take it to your appointment.



Ask 3 Questions

To begin with, try to make sure you get the answers to three key questions if you are asked to make a choice about your healthcare.

1. What are my options?
2. What are the pros and cons of each option for me?
3. How do I get support to help me make a decision that is right for me?

These resources have been adapted with kind permission from the MACC programme, supported by the Health Foundation.

* Ask 3 Questions is based on Shepherd HL, et al. Three questions that patients can ask to improve the quality of information physicians give about treatment options. *Acad Med*. 2011;86:379-83.



<https://aqua.nhs.uk/resources/shared-decision-making-case-studies/>