

Patient Information

A Patient's Guide to Tunnelled Renal Dialysis Catheter Insertion

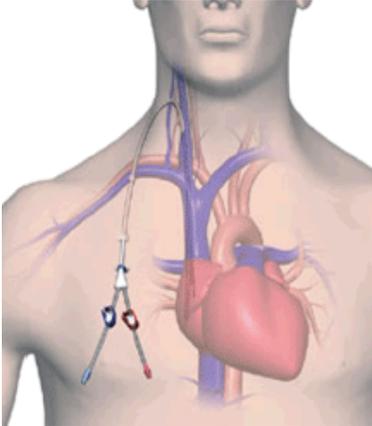
Renal Department



Introduction

This leaflet is intended to provide you with information regarding the insertion of your tunnellled renal dialysis catheter (RDC). This catheter is required for your haemodialysis treatment.

What is a renal dialysis catheter and why do I need it?



As a short term measure, or if haemodialysis is suddenly needed due to a medical emergency, a renal dialysis catheter is required. This involves inserting a small tube into a vein in your neck or groin. Normally this line is a short term option until a decision is made about final dialysis access.

What is a tunnellled renal dialysis catheter?

There are two types of renal dialysis catheter that are used:

- Temporary renal dialysis catheter - used when it is anticipated that a catheter will only be needed for a couple of weeks.
- Tunnellled renal dialysis catheter - used when a catheter is required for a longer period.

A tunnellled catheter takes a little longer to insert because it is embedded under the skin which reduces catheter movement or dislodgement and the risk of infection.

Where is it done?

The dialysis catheter insertion will usually be carried out in the minor procedures room in ward 6B. Occasionally it may need to be carried out in x-ray or theatre. It will usually take approximately one hour to perform under a local anaesthetic.

The local anaesthetic

Local anaesthetic causes a complete loss of feeling to a specific area of your body without making you lose consciousness. It works by blocking the nerves from the affected part of your body so that pain signals cannot reach your brain. Therefore, you will not be able to feel any pain during the procedure.

If you believe you may need additional medication to help you feel more relaxed, please discuss this with the doctor.

What preparation will I need?

The doctor will examine you and talk to you about the procedure in more detail. The doctor will ask you to sign a consent form. You will be prescribed a body wash to bathe or shower in prior to your procedure and a nasal ointment to help prevent nasal bacteria transferring onto your skin.

You will be able to eat and drink normally before the procedure as the renal dialysis line is normally inserted under a local anaesthetic.

How is the procedure performed?

Before the catheter is inserted you will be asked to change into a hospital gown and hair cap. You will then be wheeled on your bed to the minor procedures room and will stay on your bed throughout the procedure.

Once in the minor procedures room you will be connected to a cardiac monitor and blood pressure machine so that you can be monitored continuously throughout the tunnelled catheter insertion.

Once the site for the catheter insertion is exposed, the doctor will find and assess your vein using an ultrasound machine. Your skin will be cleaned with an antiseptic solution and local anaesthetic will be injected into the insertion site and tunnel track.

Insertion of the tunnelled catheter should not be painful, although you will feel some pushing and pressure as the catheter is being introduced. This is perfectly normal and does not usually cause significant discomfort to patients. When the procedure is finished the catheter will be stitched in position, secured, and the insertion site covered with a dressing.

Occasionally it is not possible to insert the catheter because the vein could not be found or is damaged.

What complications may occur?

Having a renal dialysis catheter inserted is considered a safe procedure but, as with any medical treatment, complications can occur:

- The most common complication is bleeding from the small skin wound where the catheter comes out. This can be stopped by applying pressure to the area.
- Occasionally, an artery in the neck or groin may be injured whilst the catheter is being inserted. This occurs in up to 3 in 100 procedures.

Usually the injury is minor and any bleeding is stopped by pressing on the side of the neck or groin. It is important that you tell your doctor or nurse if you have problems with easy bleeding or bruising, or if you are taking tablets that can affect bleeding such as warfarin.

- The RDC insertion may be unsuccessful. This may be due to a blockage or narrowing of the vein which is only detected during the procedure. If this occurs the doctor performing the procedure will explain what can be done next.
- It is possible to damage the lung on the side that the catheter is being inserted. If the lung is damaged, it may collapse making you breathless and cough. You may need another procedure (possibly insertion of a chest drain) to allow the lung to expand again. This occurs very infrequently, up to 1 in 400 insertions.

The chance of experiencing one of these complications is small. Everything is done to minimise the risk of a complication. Although any complication is extremely rare, you should be aware that they could happen.

The doctor will talk to you about all these complications before you sign the consent form.

What happens after the procedure?

After the local anaesthetic has worn off you may feel a little discomfort around the dialysis catheter due to slight bruising. You will be offered painkilling medication.

Following the renal dialysis catheter being inserted, you will attend the x-ray department to ensure the correct placement of the catheter.

If you have this procedure as an outpatient, you may be able to go home following your x-ray.

You will be advised on when the sutures (stitches) need to be removed where a nurse in the dialysis unit will remove them for you.

Caring For Your Renal Dialysis Catheter

- Make sure that your catheter entry site is covered with a dressing and secured in place at all times. If your dressing becomes dislodged please contact your renal dialysis unit for advice.
- We recommend that you do not touch your line or exit site at any time.
- Immediately report any signs of swelling, tenderness, fever, pain or oozing from the exit site to your dialysis unit.
- Immediately report any bleeding from the exit site. If there is only a small amount of bleeding, apply pressure to your exit site and contact your dialysis unit.
- If the bleeding is heavy or does not stop, dial 999 for an ambulance.
- Do not get your dressing wet. Do not take a shower or swim while you have a renal dialysis catheter. If the dressing gets wet, bacteria may enter the exit site or line and cause an infection.
- We recommend that you do not take part in any contact sports. If you do, please ensure that your catheter is securely taped to your chest. Ask your nurse for advice.
- Unless it is for a medical emergency, the line should not be used for any other purpose than dialysis. All persons using the line must have received training in its use.
- Be mindful that a seat belt may cause discomfort at the insertion site; extra padding beneath the belt may reduce this.

What are the alternatives to a renal dialysis catheter insertion?

A renal dialysis catheter is inserted to enable your blood to be pumped around a haemodialysis machine for dialysis. These lines are often not permanent and allow you to start haemodialysis. Your doctor or nurse will discuss a more permanent form of dialysis access with you.

The disadvantages of remaining on a renal dialysis catheter are:

- more prone to infection
- lower blood flow rates which means a longer dialysis time
- shorter access life than other forms of dialysis access

Therefore it is important for other access to be considered.

Alternative permanent haemodialysis access involves having an arterio-venous fistula formed, which is a surgically modified blood vessel that is created by connecting an artery to a vein. There is also another form of treatment called peritoneal dialysis which involves inserting a tube through the skin of the abdomen into the peritoneal cavity.

More information on both of these treatments can be found on the ward or please ask one of the nursing team.

Contact details

If you have any questions regarding your access, the Dialysis Access Co-ordinator is available Monday to Friday, 8am – 4pm and can be contacted on 01438 284624.

A message can be left on the answer phone.

Other Useful Numbers

Ward 6B, Nephrology (Renal) Ward, Lister Hospital	01438 285063
Renal Liaison Department	01438 285643
Lister Haemodialysis Unit	01438 284152
St Albans Haemodialysis Unit	01727 897588
Luton & Dunstable Haemodialysis Unit	01582 497538
Bedford Renal Unit	01438 286750
Harlow Renal Unit	01279 278205

Further information

www.nhs.uk

www.renal.org

www.kidney.org.uk

www.kidneypatientguide.org.uk/site/intro.php

www.enherts-tr.nhs.uk

You can request this information in a different format or another language.

Date of publication: August 2013

Author: Jeanette Cloran

Reference: TunRDCInsert Version: 2 (July 2016)

Review Date: August 2019

© East and North Hertfordshire NHS Trust