The Dudley Group
NHS Foundation Trust

The tunnelled catheter for haemodialysis

Department of Renal Medicine

Patient Information Leaflet

Introduction

The information contained in this booklet is for:

- Patients waiting to go on the haemodialysis programme.
- Patients on the continuous ambulatory peritoneal dialysis program (CAPD) transferring to haemodialysis.
- Patients waiting for another permanent vascular access device to be fitted.

It contains information on what a tunnelled catheter is, how one is fitted, how to look after it once it is in place and what to do if you have any problems.

Please note that the information in this booklet is only a guide. If you need any more information or have any queries, please speak to the Renal Unit staff.

What is haemodialysis?

People who have chronic kidney disease (CKD) have lost the normal functions of one or both of their kidneys. Usually the kidneys filter blood and remove waste produced by the activities of the body. When the kidneys no longer function correctly, the waste produced by the body cannot be removed by the affected kidneys. The build-up of these toxins can be fatal, if you are not treated.

One way of getting rid of the waste is to connect you to an artificial kidney machine. This process is called **haemodialysis**. It involves diverting your blood into an external dialysis machine, where most of the waste is filtered out. The purified blood is then returned to your body.

To achieve adequate dialysis, a minimum blood flow of 300 millilitres of blood (about a cupful) must flow through the dialyser every minute.

Most people need two or three sessions of haemodialysis a week, for an average of four hours each session.

In order for you to be connected to the dialysis machine, we need access to your bloodstream. A temporary tunnelled haemodialysis catheter is one way of accessing your bloodstream. The catheter is explained in more detail in the next few pages.

What is a tunnelled catheter?

It is a specially designed length of thin plastic tubing. The material has been produced specially for use inside the human body. It is usually inserted into a vein in the neck or the groin. All the catheters are sensitive to body temperature and they are very soft and pliable once inside the body.

The tunnelled catheter is a medium to long term measure to allow you to have haemodialysis.

Why do I need a catheter and what are the alternatives?

Your consultant will have discussed with you the reasons why you need a tunnelled catheter.

The three main ways to access a person's bloodstream for long term dialysis are:

- an arteriovenous fistula
- a haemodialysis catheter
- an arteriovenous graft

If your blood vessels are too small for a fistula, too far apart or affected in any way, the graft is then the best choice. The catheter is used for people who have problems with blood vessels in their arms and legs. Without access to your bloodstream, you cannot have haemodialysis.

Each person is assessed for the option best suited to them.

How is the catheter inserted?

The catheter is inserted by one of our renal consultants in the cardiac pacing suite. The operation can be carried out using a local anaesthetic (the area is numbed) or general anaesthetic (where you will be asleep). This will depend on your general health at the time.

If you have a local anaesthetic you should not feel any pain; however, you might feel some gentle pushing as the tube is inserted. This is normal.

The catheter is stitched in for security and a clear dressing is used to keep the catheter in place. The whole procedure may take between 20 to 40 minutes, depending upon the complexity of the individual case.

As with any medical procedure, there is always the risk of complications. These may cause the catheter to fail, and there may be times when the catheter will need to be replaced.

What happens after the catheter has been put in?

- Once inserted, the catheter can be used straight away, if needed. However, we prefer to leave it for a day or so to allow time for any swelling to go down.
- Every time you have dialysis, the staff will check the catheter dressing for any sign of bleeding or infection.

How do I care for the catheter?

Once the catheter has been put in, you will need to care for it to make sure that it works well and will last. The renal nurse will explain to you how to check and care for it.

Here are some tips to help you look after your catheter:

Do

- Try to keep the site where the catheter goes in dry. The nursing staff can give you a special sleeve that covers your catheter for showering and swimming; please ask a member of staff about this.
- Check the dressing is in place at least daily but do not remove it.
- Please tell the Renal Unit if you have any of the following:
    - Signs of wetness or smell from the dressing
    - A temperature or fever
    - Pain or tenderness in the catheter area, your arm or shoulder.
    - Any swelling on your hand or arm on the catheter side.
- If there is bleeding from the catheter site, press firmly it with a piece of gauze or a clean tissue for five minutes. **Please do not remove the existing dressing.** Keep some pieces of gauze and tape with you or in the car at all times.

  If the bleeding does not stop, contact the Renal Unit for advice.
- Ask for advice any time you need to.
- Use the Renal Unit helpline for any queries.
- Explain to your family and/or carer about your catheter.

Take good care of your catheter. It is your lifeline.

Do not

- Push the catheter back in if you think it has come out slightly. **Contact the Renal Unit immediately**.
- Expose the catheter to a dusty atmosphere. This may cause infection.
- Lift or pull heavy objects. This may cause movement of the catheter inside your body.
- Perform exercises like rotating your arm or pull-ups. This may cause the catheter to move.
- Bend the catheter. This may put pressure on the site where the catheter comes out.

What are the risks from this type of catheter?

- Bleeding from the site where the catheter goes in.
- Infection of the site or the area around the catheter under the skin.
- General infection in the bloodstream called septicaemia, which could spread elsewhere such as the heart, joints and the brain.
- Infection at the tip of the catheter that can obstruct blood flow during dialysis.
- The arm or hand on the catheter side may become swollen and painful.
- Catheters that are inserted into a vein in the groin can cause pain and swelling of the leg, and possibly deep vein thrombosis (DVT). This is blood clots in the deep veins of the legs.
- The catheter may leak blood from the catheter ports. The port is the point at which the catheter enters your vein. It is sometimes called a central venous access device.
- Blood may leak into the tissue surrounding the catheter site and cause bruising.
- The catheter may become blocked with blood clots.

Some of these risks are more common than others. If any of these happen to you, try not to worry too much but talk to the renal staff for further advice.

Some advice in emergency situations

What can I do if the catheter has come out?

- Try your best to keep calm.
- If blood oozes out from the site, press the exit site firmly with your finger until someone can get a piece of gauze or clean tissue for you.
- Put the gauze or clean tissue on the bleeding site on top of the existing dressing.
- Ask someone to call the hospital, or call them yourself if you are on your own.

  Tell them you are a haemodialysis patient and your catheter has come out.

  You will be told to come either to the Renal Unit or the Emergency Department at Russells Hall Hospital, or to go the nearest Accident and Emergency (A&E) department.

What can I do if the catheter leaks?

- Check if the caps on the ends of the catheter are tight. Tighten them if necessary.
- If the leak still persists, use the blue plastic clamp provided by the Renal Unit and clamp along the catheter tube near to the dressing.
- Contact the Renal Unit as soon as possible.

What can I do if I have bleeding from the exit site?

- Use gauze or a clean tissue to press down on the bleeding site, over the top of the existing dressing.
- Ask someone to call the Renal Unit, or call them yourself, and prepare to come to the hospital.

In all cases if bleeding cannot be controlled, please dial 999.

Contact information

The Renal Unit: 01384 244384

7.30am to 8pm, Monday to Saturday

9am to 3.30pm, Sunday

Ask to speak to a vascular access nurse (VAN) or a member of the haemodialysis staff, if a VAN is not available.

Out of these hours, ring the hospital switchboard number and tell them you are a renal patient. Ask to speak to the haemodialysis nurse on call.

Remember: the renal team is always willing to give help and advice. Please contact us, however small your query.

Russells Hall Hospital switchboard number: 01384 456111

This leaflet can be downloaded or printed from:

http://www.dgft.nhs.uk/services-and-wards/renal/

If you have any feedback on this patient information leaflet, please email dgft.patient.information@nhs.net

This leaflet can be made available in large print, audio version and in other languages, please call 0800 073 0510.

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