Temporary (Non-Cuffed) Haemodialysis Catheter

Introduction
This leaflet is about the procedure required to put in a temporary (non-cuffed) haemodialysis catheter (also called a line). It is intended to provide you with the information needed before you agree to have the procedure performed. It does not replace discussion between you and your doctor or the renal access nurse specialist. Please ask all the questions you need to ensure that you fully understand what is involved.

What is a temporary haemodialysis catheter and why do I need it?
For a haemodialysis machine to work there must be a way of taking blood from you to pump it into the kidney machine. A temporary catheter is one way of doing this and it can be used rapidly. Catheters allow immediate access to your bloodstream for your treatment. Although your type of catheter is temporary it can be used for up to 3 weeks while a more permanent plan is arranged for you.

The catheter is put into a vein in your neck and the tip is fed into the big vein in your chest that takes blood to your heart.

Who will insert the catheter and where will it be done?
A kidney specialist (Consultant) or a trainee kidney specialist (Specialist Registrar) or a specially trained nurse will do the procedure. The operator performing the procedure may be different to the one who recommended the procedure to you but they will be happy to answer your questions. It will be done in a special procedures room in the renal unit in the Royal Devon and Exeter NHS Foundation Trust. It is done under local anaesthetic so you will remain awake. You can eat and drink before and after the dialysis line is put into the vein. This takes approximately 30 minutes. You will be asked to give written consent prior to the procedure.

How is the catheter inserted?
A trained doctor or nurse will insert the catheter in a special procedure room on the kidney unit. You will be asked to lie flat on the bed and your head will be tipped down slightly lower than your feet. Your skin in the neck area will be cleaned with an antiseptic solution and some local anaesthetic is injected into the neck area, but you will remain awake during the procedure. (If you are allergic to anything please let the doctor or nurse know).

To reduce the risk of infection during the procedure, the doctor or nurse wears a gown and a mask. A large sterile paper towel will cover your face and neck; this can feel claustrophobic.
The doctor or nurse will find the position of the vein using an ultrasound scan.

During the procedure you may feel some slight pressure, but if you experience any sharp pain, please let the doctor or nurse know so he or she is able to insert more local anaesthesia. Once the catheter is inserted, it will be held in place by two stitches. A dressing will cover the exit site where the catheter comes out of the skin. A nurse will remain with you at all times.

Following the procedure a chest x-ray will be performed to ensure the catheter is in the correct position.

You may experience slight discomfort or neck stiffness after the local anaesthetic has worn off. Taking simple painkillers such as Paracetamol will make you more comfortable.

To reduce the risk of infection after the procedure it is very important to avoid getting the catheter or dressing wet. The dressing will be changed once a week or more often if needed, by the dialysis nurse at the beginning of your dialysis session.

Are there any risks or complications?

Having a 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 and is not dangerous. Sometimes it can take an hour or even longer to stop bleeding.

Occasionally, an artery in the side of your neck may be injured whilst the catheter is being inserted. Usually the injury is minor and any bleeding can be stopped by pressing on the side of the neck. There may be a degree of swelling and bruising that means that the operator will have to stop the procedure and plan to try again once the bruising has settled. It is important that you tell your doctor or nurse if you have a problem with easy bleeding or bruising or if you are taking tablets that can affect bleeding such as warfarin.

Occasionally the catheter can cause the heart to beat too slowly. Your heart beat is monitored throughout the procedure and the catheters position can be adjusted to resolve any irregularities.

Rarely air can enter your blood stream during insertion of the catheter. This can normally be treated easily and quickly by giving oxygen using a basic face mask. To help prevent this, you will be asked to lie as flat as comfortable. Sometimes the bed will be tipped so that your head is slightly lower than your feet.

Very rarely a nerve may be damaged either from the injection of local anaesthesia or directly from the needle. This is usually temporary and recovers without any medical intervention.

Very serious complications are rare but you should be aware that they could happen:

- The vein into which the catheter is being inserted can be damaged or torn. This could result in internal bleeding in the chest. Additional treatment would be required which could mean putting a tube into the chest (a ‘chest drain’) to remove the blood or even an operation.

- 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 it to expand again.

- It is very rare but possible to damage the heart muscle. This is potentially life threatening. Any chest pain you may experience needs to be reported to the Doctor immediately.

The chance of experiencing one of these serious complications is very small. Everything is done to minimise the risk. Death as a result of a complication is extremely rare.

Once the catheter is successfully in place, the main complications are blockage of the catheter by blood clot or infection. A blocked catheter will often need to be removed and replaced. An infected catheter must be removed as quickly
as possible. If the catheter is not removed, the blood may carry infection to other parts of the body such as the heart valves or bones. Signs of infection are fever and flu-like symptoms and shivering. You should report these symptoms immediately to a doctor or nurse in the kidney unit.

To reduce the risk of infection, personal hygiene and proper care of your catheter is essential. The nurse looking after you in the Day Case Unit will give you two leaflets titled ‘How to Care for your Haemodialysis Catheter’ and ‘Bactroban Nasal Ointment’ together with a tube of Bactroban Nasal Ointment and will discuss this with you in more detail.

**When do I contact my dialysis unit?**

Please contact your Kidney Unit on 01392 404792/4791 or 01392 402590 if any of the following occur:

- If the catheter appears to have moved further in or out of your body.
- If the area around your catheter becomes mucky or you see pus.
- If the area feels sore, or becomes red and inflamed.
- If you develop a temperature, become shivery or generally feel unwell.
- If the dressing becomes loose or removed.
- If the red caps on the ends of your catheter fall off.
- If you notice a split or leakage of blood or clear fluid from your catheter.
- If the stitches holding your catheter in place have broken free of your skin.

- If your catheter falls out, apply direct pressure for a full 5 minutes with a clean cotton cloth. Contact your dialysis unit on the above number immediately. If you have any further questions or require any advice, please contact the Kidney Unit on 01392 404791/4792 or 013920 402590.

**To contact us:**

If you have any queries or concerns about the procedure whatsoever, or have not understood anything you have been told, please do not hesitate to ring us.

- Monday-Friday (except bank holidays) 9am-5pm, please contact one of the Renal Day Case Unit nurses on 01392 404791/4792
- At all other times or if the above number is unavailable, please ring the hospital switchboard on 01392 411611 ask for the Renal Bleep Holder.

**Finally…**

We hope that you have found this information leaflet helpful. Please remember that you are free to ask the operator inserting the catheter as many questions as you would like. You should be satisfied that you have received enough information about the procedure before you sign a consent form.

The Trust cannot accept any responsibility for the accuracy of the information given if the leaflet is not used by RD&E staff undertaking procedures at the RD&E hospitals.

© Royal Devon and Exeter NHS Foundation Trust

Designed by Graphics (Print & Design), RD&E