Oxford Kidney Unit

Temporary line for haemodialysis
Information for patients
Have you been told you need to have a temporary line for haemodialysis? Don’t panic, we’re here to help.

What is a dialysis line?

A dialysis line is a small plastic tube which is inserted into one of your large veins. This tube is attached to two separate lines which are connected to a dialysis machine. One line removes the blood from you, which is then cleaned by a filter within the dialysis machine. The clean blood is then returned to you through the other line.

Why do I need a dialysis line?

Most people who need a temporary dialysis line have a condition called acute kidney injury. Acute kidney injury is a sudden decrease in your kidney function, which causes a build-up of waste products, salt and fluid that your kidneys would normally get rid of. Haemodialysis removes these waste products and excess fluid from your body when your kidneys aren’t working properly.

Sometimes temporary lines are used for other conditions, such as needing a plasma exchange or if you are on long term dialysis and your usual access is not working.
Where is the line inserted?

Your line will be inserted by a kidney doctor or nurse in the mini-theatre on the renal ward.

There are two types of temporary line; a ‘groin line’ and a ‘neck line’.

- A groin line is placed into the large (femoral) vein in your groin. Groin lines can be used for up to 3 days.
- A neck line is placed into the large (internal jugular) vein in your neck and can be used for up to 14 days. Neck lines are often inserted on the right hand side, but can be placed on the left if the vein on your right is not suitable.

It may be difficult to say how long you will need the line for, but the kidney doctor will advise you on which line is the most suitable. If you require dialysis for longer, then another line will be inserted in the most suitable place. If you need a replacement line, this will be inserted in the mini-theatre on the renal ward.

What will happen during the procedure?

At the start of the procedure you will be asked to lie flat; this allows us to easily find your vein. The procedure usually takes around 30 minutes.

Your line will be inserted under a local anaesthetic. This is an injection of anaesthetic which makes the area go numb, so you will be able to remain awake during the procedure. The doctor or nurse will use an ultrasound machine to decide where the line should go. This is a handheld probe that is rolled over your skin and uses sound waves to create an image on a screen.
Once the doctor or nurse has decided on the best place for your line, they will clean your skin with an antiseptic and cover the area with a sterile (clean) sheet. Local anaesthetic will be injected into your skin where the line is to be inserted. This does sting a little, but then the area will go numb.

We will make a small incision (cut) approximately 3cm across, to allow us to access the vein. We access the vein using a needle called an ‘introducer needle’ and then insert two guide wires into the vein. To help us widen the skin for the line to be inserted, we use dilators. As we insert the line into the vein you will feel a bit of pushing, which may feel uncomfortable, but it should not be painful. The line will be secured using two or three stitches, which will be removed when the line is taken out. The exit site will be covered with a sterile clear dressing.

### Are there any risks?

Although they do not happen often, complications can occur and it is important to be aware of them. These can include:

- bleeding (serious bleeding is very rare)
- pain (we can give you paracetamol or other pain relief after the procedure, if needed)
- infection (this is very rare)
- collapsed lung (pneumothorax) from neck line insertion only - this is extremely rare
- abnormal heart rhythms (if you are having the neck line procedure you will be attached to a heart monitor so that we can monitor your heart rhythm).

These complications may be temporary, but some may also require treatment. Before you sign the consent form your doctor or nurse will discuss these with you, as well as any specific risks which might apply to you.
How will my temporary line be used?

Once you have your line inserted it can be used immediately. A member of the dialysis team will attach the ends of your temporary line to the dialysis machine. Once you have completed your dialysis session, the line will be flushed with clean saline (salt water solution) and then sealed with a solution called Taurolock. This works to stop the line from blocking and helps prevent infection.

What happens next?

Whilst you are in hospital we will be monitoring your kidney function daily. These results will help us decide whether you need on-going dialysis treatment. This will be discussed with you during your stay.

Many people with acute kidney injury recover their kidney function, so that they no longer need dialysis. If you do need on-going dialysis we will discuss the long term treatment options with you.

When your kidney function has recovered, your temporary line will be removed before you go home. You will then be followed up by your kidney doctor in your local renal outpatient clinic.

If you have any questions about any of the information in this leaflet, please speak to either your renal nurse or the dialysis nurses.
If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call 01865 221 473 or email PALSJR@ouh.nhs.uk