



What Is A Tunnelled Central Venous Catheter?

Information for patients who are going to have a tunnelled line

What is a Tunnelled Central Venous Catheter?

A tunnelled central venous catheter (CVC) is a type of intravenous device designed to stay in place for long periods (eg months). It is inserted into the chest area and is 'tunnelled' to emerge a few inches away through the skin. They are sometimes referred to as Hickman Lines.

The benefits of a Tunnelled Central Venous Catheter:

- CVCs allow fast and reliable access for intravenous injections and infusions, transfusions and for taking blood tests
- They are probably more comfortable than frequent blood tests and cannulas
- They are occasionally essential for the administration of certain medicines
- They can stay in place for many months

Are there risks of having a Tunnelled Central Venous Catheter?

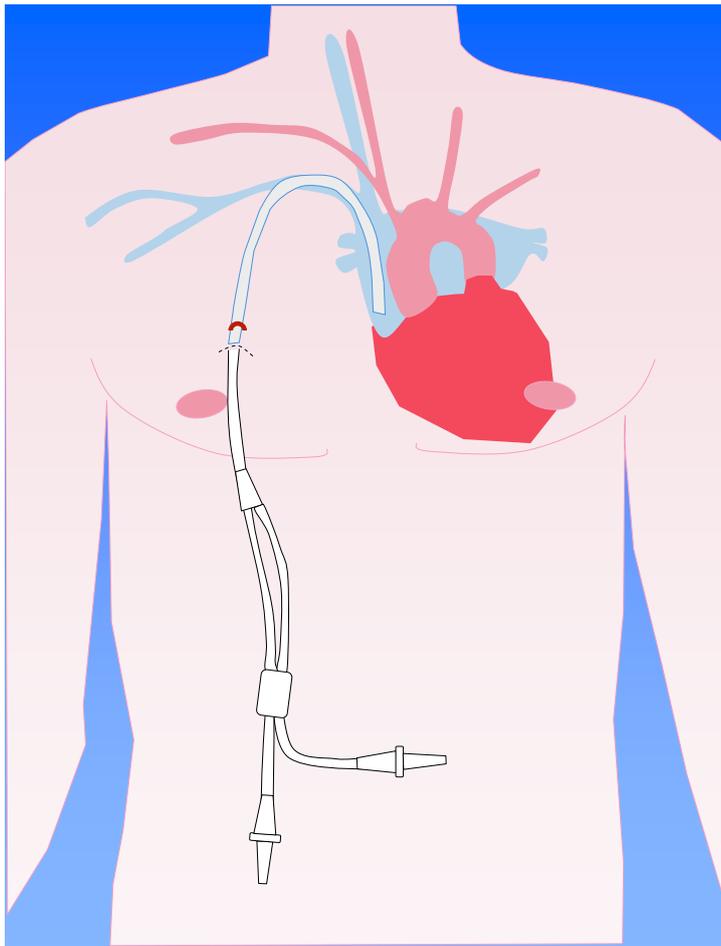
Bleeding: There may be bruising or rarely, significant bleeding. Your doctor may need to prescribe a platelet transfusion or other medicine before the procedure to help your blood clot if this is a problem. If you take blood thinners/anticoagulants these may need to be stopped before the procedure.

Pneumothorax (collapsed lung): Rarely the lining of one of your lungs is punctured during the procedure. This often resolves spontaneously but may occasionally require insertion of a second tube (a 'chest drain') to re-expand the lung.

Infections: The risk is reduced by keeping the line scrupulously clean. Infections will require intravenous antibiotics, usually in hospital, and the line may have to be removed if the infection is not successfully treated.

Blocked line: This may result in difficulty taking blood from the line, or it may also be difficult to give medication through the line. It is essential the line is regularly flushed to avoid this.

Rupture: This is very rare, but may occur if liquids are forcibly injected, or if the line gets pinched between the collarbone and rib.



Where the tunneled line will be inserted in the body and how it will look

Before your tunneled line is inserted

The hospital nurse will take some skin swabs several days before the tunneled line is inserted. This is to check for bacteria that may exist on your skin.

You will be given some chlorhexidine body wash with instructions to shower/wash with the solution the day before the procedure and on the morning of the line insertion.

You will have a blood test a few days before your line insertion. This will check your blood clotting.

If you are on anticoagulant medication (blood thinners), for example, warfarin, rivaroxaban or apixaban, this will need to be stopped in advance of the procedure. You will be advised about this by the hospital team.

Please contact the Radiology Nurses on 01305 255276 for further advice if you have NOT been instructed to stop your blood thinner medication.

The procedure is usually done with a local anaesthetic injection to numb the skin. You may choose to have some sedation too, although you will need to inform the x-ray nurses before the day of the procedure if you want to be sedated.

Consent

Informed consent will be obtained prior to the procedure. Staff will explain all the risks, benefits and alternatives before asking you to sign a consent form. If you are unsure about any aspect of the treatment proposed, please do not hesitate to speak with a senior member of staff.

How is the line inserted?

The procedure is normally undertaken in the radiology department. Before the procedure, the Interventional Radiologist will explain the procedure and ask you to sign a consent form. You will have the opportunity to ask questions.

A nurse will take your details and attach a monitor so your blood pressure, pulse etc can be recorded. You will be given some oxygen.

The skin will be cleaned with antiseptic solution to help avoid infection. We will keep everything as sterile as possible; you will have your head covered with a sterile drape and this will be lifted to allow you to see out.

An ultrasound and x-ray camera will be used to find the best position for the procedure.

The skin and deeper tissues on one side of your neck and front of your chest will be anaesthetised with a local anaesthetic; this will sting briefly before the tissues go numb.

The lines are usually inserted into a neck (jugular) vein.

Tunnelled central venous catheters are tunnelled a short distance under the skin and, afterwards, you will have a narrow plastic tube 10 to 20cm long emerging from the skin on the front of your chest. Stitches are used to secure the line in place until it fixes itself in 2 to 3 weeks. The stitches are removed from the small wound near the clavicle after 10 days. The stitches are removed from the exit site after 2 to 3 weeks.

You will have an absorbent dressing applied to the neck and chest where the line has been inserted. These dressings are normally changed after 24-48 hours and, thereafter, once a week. If there is a lot of fresh bleeding onto the dressing after the procedure, you should inform the hospital staff without delay.

What happens afterwards?

You will be taken back to the ward on a bed. Nursing staff will monitor your blood pressure, pulse, temperature etc, to make sure there are no problems. You will stay in bed for a few hours, until you have recovered.

You may eat and drink normally once the sedation has worn off.

You will normally be allowed to go home about 4 hours after the procedure, provided you meet the following criteria:-

You must:

- Have a responsible adult to collect you, as you cannot drive home or travel on public transport.
- Have someone to stay with you for the first night, just in case your wound bleeds or you feel unwell.
- Have access to a telephone.

Will it hurt?

The local anaesthetic may sting briefly and, after that, all you should feel is touch and pressure in the area where the Interventional Radiologist is working. There will be a nurse looking after you. If the procedure does become uncomfortable for you, she/he will arrange for you to have pain relief. Although it may feel a little sore around the line after it is inserted, this is easily treated with painkillers and settles within a couple of days.

Washing and showering

The wounds should be kept dry for 10 days. Following this if they have fully healed then they can be allowed to get wet. The line should never be submerged in water.

Who to contact

If you have a problem or concern about any aspect of your tunnelled line, please contact a member of the hospital team looking after you. They can be contacted on the number below:

Name: Telephone:

or you can call the Radiology Sister on 01303 255276.

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If you have feedback regarding the accuracy of the information contained in this leaflet, or if you would like a list of references used to develop this leaflet, please email pals@dchft.nhs.uk



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