

Vascular Radiology Service **Tunnelled Central Line Insertion**

Information for patient



Leeds
Radiology

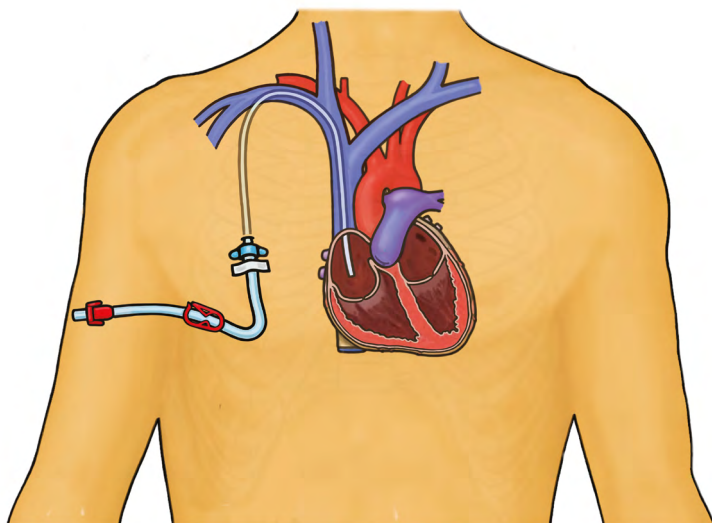
Your doctor has recommended for you to have a Tunnelled Central Line inserted. This leaflet will explain what the operation involves, the intended outcomes and the possible risks.

What is a tunnelled central line insertion?

A tunnelled central line is a thin, hollow, silicone tube that is inserted in one of the large veins that carries blood to your heart called the vena cava. It can be inserted from a major blood vessel in the neck, or in the groin.

If it is a Hickmann line this will provide long term access for medical professionals to give chemotherapeutic drugs, intravenous medications, nutrition, and draw blood samples from you if needed for analysis.

If it is a dialysis line, it will provide access for kidney dialysis.



How is a tunnelled central line inserted?

Consent

Before the procedure, the Radiologist will meet you in our recovery area to discuss the procedure in more detail, the risks and answer any of your questions to your satisfaction before you provide your permission and sign your consent form

Anaesthetic

Tunnelled line insertion is done under local anaesthetic. The skin over your neck and chest (neck access) or your groin (groin access) is cleaned and local anaesthetic is injected to numb the skin and the deeper tissues. You may feel a sharp scratch and stinging sensation as the anaesthetic goes in but it will quickly feel numb.

Procedure

Tunnelled line insertion usually takes around 30 minutes to one hour, though every patient is different and operations may take longer.

You will be covered with sterile drapes during the operation and the X-ray machine will hover over you to take images and show the placement of the tube inside the body. The interventional radiologist will make a small incision in your neck or your groin that will serve as the entrance for the central line catheter into your vein and another incision near your collar bone (neck access) or your groin (groin access) to create an exit for the tube. A thin metal tube is passed under the skin in between the incisions and the line is inserted. A specialized dressing that is antiseptic and waterproof will then be used to cover the line insertion site.

Staff involved

Interventional Radiology (IR) procedures are performed by a multidisciplinary team. The team includes the following key Staff:

Interventional Radiologist (Consultant/Fellow):

A doctor specially trained in minimally invasive, image-guided techniques who performs the procedure.

Radiology Nurses:

Highly trained nurses who care for the patient before, during, and after the procedure. They assist with sedation, monitor vital signs (heart rate, breathing, oxygen levels), and may "scrub in" to assist the radiologist directly.

Radiographers:

Experts in imaging equipment who operate the machines to provide real-time guidance for the doctor.

Senior Clinical Support Workers (SCSWs):

Assist with the setup of the room, patient positioning, and maintenance of sterile conditions.

What are the risks?

Tunnelled line insertion is overall a safe procedure and carries the following risks:

- Catheter-related bloodstream infections remain a leading problem, with rates of 2–5 per 1,000 catheter-days. The tube is a foreign object inserted inside the body and it is important to keep it clean. If the exit site becomes red, swollen, or painful, the line may have to be removed.
- Pneumothorax - less than 1 in 500 if the jugular vein is used; less than 2 in 100 if the subclavian vein is used. It is defined as a collapsed lung where the air escapes in the space between your lung and chest wall. In small quantity, it will not cause any problems but if it is big enough, a chest drain may need to be inserted.
- Blood clots may occur in less than 5 in 25 in central line and less than 5 in 100 for veins.
- Allergic reaction to contrast dye (mild symptoms like nausea, itchiness and rashes occur in 3%; moderate to severe symptoms such as severe vomiting, bronchospasm occur in less than 1%; risk of death is rare, estimated at 1:170,000).
- Bruising, pain or discomfort.
- X-rays will be used to make images of your body and guide your doctor during the procedure. X-rays are a type of radiation. We are all exposed to low levels of natural radiation as part of our everyday lives and medical x-rays give an extra dose of radiation. Radiation can increase your chances of developing cancer many years or decades after the exposure. The chances of this happening to you as a result of this procedure are considered to be very low.

What else to expect from this operation?

Pre-operative preparation

To promote patient safety during your operation, the following patient preparation are required:

- You can eat and drink as normal.
- To lessen your risk of getting an infection, you will need to complete the prescribed a course of antiseptic wash and nasal cream.
- Most blood thinning medications need to be omitted, please discuss with us if you are taking any.
- If you have bleeding disorders or your blood clotting function is below threshold, you may require a blood transfusion; please inform us if you have concerns.

Recovery

After the operation, you will be transferred to our recovery area, where you will be closely monitored:

- Your vital signs and the puncture site will be monitored closely.
- You will be placed on bed rest for an hour or so to allow you to recover from the operation and reduce your bleeding risk.

Aftercare

Once stable, you will then be transferred back to the renal ward to recuperate and/or discharged. You may expect the following:

- Most people find the site where the line is inserted to be sore, once the anaesthetic wears off. Please ask the ward staff for pain relief as needed.
- The line and the surgical site will be assessed by the ward staff to ascertain when it's safe for you to be discharged from the hospital.

Care at home

All being well, you will normally be discharged on the same day of your operation (Day Case).

- **Escort and overnight support:** please have a responsible adult to escort you home in a car or taxi and stay with you overnight.
- **Exercise:** limit your activities, get plenty of rest and gradually introduce light exercise after a day unless advised otherwise.
- **Work:** you can go back to work as normal after a day unless you feel unwell.
- **Driving/travel:** no definite contra-indication for traveling; however, you are advised not to drive for at least 48 hours after your operation.
- **Medicines:** keep pain medications at home for when you need them; if you were asked to stop taking blood thinners, we will include instructions when to resume those.
- **Follow-up:** this will be organised by the referring doctor.

Contact information

We hope some of your questions have been answered by this leaflet. If there are any questions you would like to ask before you come for your operation, please get in touch.

Via telephone

- **Interventional Radiology:**
SJUH: 0113 326 6841
LGI: 0113 392 3311
(Monday - Friday from 9am until 5pm, except Bank Holidays)
- **Out of hours:** Please obtain from the admitting ward.
- Your GP or NHS direct

Via email

- leedsth-tr.radiologyenquiries@nhs.net
(We will aim to answer your query within 1-3 business days).

How to get to our department

We are located in the Ground Floor of Lincoln Wing at St James's University Hospital and in Jubilee Wing, B Floor at Leeds General Infirmary.

Scan the QR codes or follow the links below for more information on how to find us.

Lincoln Wing

www.accessable.co.uk/leeds-teaching-hospitals-nhs-trust/st-james-s-university-hospital/access-guides/lincoln-wing



Jubilee Wing

www.accessable.co.uk/leeds-teaching-hospitals-nhs-trust/leeds-general-infirmary/access-guides/jubilee-wing





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