

Patient information leaflet

Hickman line insertion

Radiology department

Introduction

We hope this guide will answer your questions about your Hickman line insertion procedure.

Please contact the team if you require further information via the details at the end of this leaflet.

What is a Hickman line?

A Hickman Line is a hollow silicone tube which is inserted into one of the large blood vessels through a small cut in your upper chest (entry site) and your neck via the jugular vein. The Radiologist (x-ray doctor) or the Vascular Access Practitioner passes the tube along the large blood vessel until it reaches the entrance to the heart. It is guided under your skin for a few inches and then comes out through a small cut in your lower chest (exit site). There is a small cuff around the exit site, this helps keep your line in place and helps to prevent any infections from entering. The line will also be stitched in to secure it.

Why do I need a Hickman line?

There are many benefits of a Hickman line. It prevents the need for daily punctures of your skin to obtain the blood tests required during your treatment, as the blood can be taken daily from your Hickman Line. It provides permanent access to allow administration of chemotherapy, blood products and intravenous fluids or antibiotics that you might need during the course of your treatment. It prevents the need for continual insertion of cannulas (tubes) for this purpose.

With proper care, your Hickman Line can stay in place for the duration of your treatment.

Are there any alternatives?

Having a needle put in to a vein in your arm or hand every time you have treatment.

Having another type of central venous access device put in, such as a PICC line, which has similar benefits and risks to a Hickman Line. But a PICC line has only two lumens and you may need three to have your treatment, which is why your doctors have asked you to have a Hickman line put in.

Please ask your doctor or nurse for more information about these alternatives.

Who will be doing the Hickman line insertion?

You will be cared for by the radiology nursing team who will assist the radiologist (x-ray doctor) with your procedure. A radiographer will be taking your x-ray images during your procedure.

There may also be a student present.

Are there any risks?

X-ray radiation: All x-ray procedures involve exposure to radiation in varying amounts. The dose you get from a medical x-ray is very low and your doctor has determined that the benefits of having the examination outweigh potential risks.

The radiographer is present throughout your test making sure that the dose is kept as low as reasonably possible and the duration and level of x-rays are kept to a minimum.

Patients aged 12 to 55, could you be pregnant? X-rays can be harmful to an unborn baby and should be avoided by patients who are or may be pregnant.

It is recommended that the examination is performed within 10 days of the first day of your menstrual period if pregnancy cannot be excluded.

Contrast medium: A very small number of patients have an allergic reaction to the contrast medium (an iodine based solution often known as x-ray dye). This can be minor, severe, or even life threatening but the chances of this occurring are very rare. If you get an itchy rash or difficulty breathing during the procedure tell a member of staff, the team will provide appropriate treatment.

Before your examination begins the radiographer will ask you a series of questions about your medical history, including any allergies you may have. This will help us assess if you are at risk of an allergic reaction to the x-ray dye.

Risks caused by the procedure:

Pneumothorax: this happens when your lung is accidentally punctured, allowing air to get between your lung and chest wall. It is very rare (1:1,000 risk). The doctor putting in your line will be able to see if this has happened using real-time x-rays. Sometimes, only a small amount of air gets in, so your body can take care of it on its own and you do not need to be admitted to hospital. But if there is more air, you will have to be admitted to hospital to have it taken out.

Bleeding: you may have a small amount of blood oozing out where the line is put in and/or comes out.

Risks after placement:

Although most patients do not have any problems with their Hickman line, it is important that you know the potential risks.

Loose or disconnected needle-free device: this can cause air to move into the line. If the device is loose, tighten it. If it has come off or is missing, check the line is still clamped and go to your local Accident and Emergency to get the device replaced.

Cough, chest pain, shortness of breath and/or throat irritation within hours of having your line put in: if you have any of these, check that all the lumens are clamped and the needle free devices are in place and go to your nearest Accident and Emergency to get the line checked.

Thrombosis (blood clot): as the Hickman line is in one of your veins, there is a risk you can develop a blood clot.

Symptoms include: swelling around your line • swelling/discomfort in the arm, hand and neck on the side of your Hickman line • blocked line.

If you have a blood clot, your line may be taken out and you will be given medication to help break it down.

Bruising, pain and/or discomfort: it is common to have some bruising, pain and/or discomfort where the line tunnels under the skin for a few days after its insertion. You can take a mild painkiller such as paracetamol to ease this.

Bleeding: many people have a small amount of bleeding after the line has been put in. This should stop after a few hours. Severe bleeding is very rare.

If you are taking any medications that can affect the way your blood clots, or you have a history of abnormal bleeding, you must let us know before the day of the procedure.

Infection: you can develop an infection either inside the Hickman line lumens or around the area where the line leaves your body (exit site). Your immune system may be weakened due to your illness or chemotherapy treatment and this makes you more likely to develop an infection. You must seek medical help straight away if you have any of the following symptoms • redness, oozing and/or soreness around the exit site • hot flushes or shivering before or after your line has been accessed/used for treatment • temperature above 38°C.

A securement dressing will be applied at the line exit site to help minimise the risk of an infection occurring.

Lumen problems: one or more of the lumens of your line can become blocked. To stop this from happening, they need to be flushed with saline (salt solution) regularly and promptly when you have finished an infusion.

Preparation for a Hickman line insertion.

An appointment will be made for you to attend for a pre-assessment about a week before your procedure, where you will be seen by one of the radiology nursing team.

They will take some swabs and organise to have some blood samples taken.

You may be asked not to eat for four hours before the procedure, although you may still drink clear fluids such as water.

Please leave any jewellery or valuables at home.

Please contact the booking team before your appointment if:

- -you are or think you may be pregnant
- If you have had a previous allergic reaction to x-ray dye (contrast agent) or are allergic to iodine
- If you weigh over 30 stone/190 kilograms
- If you plan on using hospital transport or need a hoist to transfer
- If you require an interpreter – please inform us as soon as you receive your appointment letter, and we will arrange an interpreter for you.

If you are unsure or have questions about your preparation, contact your doctor or the X-ray department for advice.

Allergies

If you have any allergies you must inform your doctor. If you have previously reacted to contrast medium (X-ray dye) you must tell your doctor about this.

Medication

Please contact the radiology department if you are taking blood thinning medication (anti coagulants) such as Warfarin, Aspirin, Rivaroxaban, Dabigatran, Apixaban, Edoxaban or

Clopidogrel, Ticagrelor.

You may be asked to stop or be given an alternative medication.

Getting to us

When attending The Princess Alexandra Hospital (Hamstel Road, Harlow, Essex, CM20 1QX), follow the signage to the radiology reception, which is located on the ground floor, green zone. Please let the receptionists know that you have arrived for your appointment.

When should I arrive?

Please arrive in the radiology department at your given appointment time. A notification through text or letter should have been sent to you to confirm this appointment.

Can someone stay with me in the hospital?

You may have a friend or relative attend with you, but they will be asked to stay in the waiting area while you have your procedure.

Children are not allowed in the waiting area unattended. Our staff are not permitted to supervise children, so please ensure child care arrangements are in place to avoid your tests being rescheduled.

The day of the procedure

You will be shown to a changing cubicle and asked to undress and put on a hospital gown. You may also be asked to remove jewellery, dentures, glasses, or other metal objects, which may show up on the X-rays.

The procedure

Your identification will be checked by a nurse and radiographer, a brief history will be taken; please tell the radiologist what medication, severe allergies, choking episodes or other medical conditions, such as thyroid disease and diabetes you may have.

Before the procedure, the interventional radiologist will explain the procedure and ask you to sign a consent form.

Please feel free to ask any questions that you may have and, remember that even at this stage, you can decide against going ahead with the procedure if you so wish.

If you agree to go ahead with the procedure, a nurse will take you to the Interventional Radiology theatre and ask you to lie on the x-ray table. They will connect you to monitoring equipment and check your pulse and blood pressure during the procedure.

There will also be a radiographer in the theatre to control the x-ray imaging.

The doctor will find a suitable vein in your neck, near your collarbone, using an ultrasound machine.

They will then use antiseptic skin preparation to clean the area of skin where your line is going to be put in and cover you with a sterile cloth which partly covers your face.

Next, they will inject local anaesthetic into your neck and chest area. This may sting a little as it goes in. After this, the area will be numb and you should feel only pressure, not pain.

If you do feel any discomfort during the procedure, tell the doctor as they can give you more local anaesthetic.

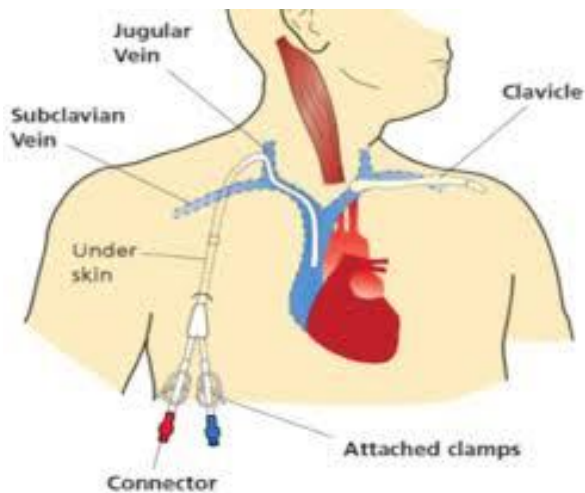
The doctor will make a small cut in the skin in your neck. This is the 'insertion site'. Using ultrasound images, they will gently guide the tip of the line into a large vein (jugular), towards your heart.

Next, they will tunnel the other end of the line under the skin of your chest. The line then reaches the 'exit site', where it comes out of your body, so you will also have a small cut here, too.

The doctor will close the small cuts in your neck and chest with stitches and cover them with dressings.

Your nurse, radiographer and radiologist will be with you the whole time during the procedure and will explain what is happening or what you need to do on the day. If you have any questions or concerns, it is OK to ask.

The diagram shows the position of the central line.



How long will this take? The procedure usually takes about 30 minutes, although you will be in the department for a longer period to ensure there have been no complications.

Is it uncomfortable? This procedure is not painful but, it can be uncomfortable and unpleasant.

After the procedure

After the procedure, you will be taken to the radiology recovery area. If the procedure is being done as a day case, you can go home later that day after 2 hours of observation. Before you leave hospital, a nurse will check your Hickman line and put on new dressings, if needed.

They will also book an appointment for the next day to have your dressing changed and your line flushed. The stitches in your neck are taken out after 7– 10 days and those in your chest are taken out after 21 days.

Can I drive after my procedure?

We recommend that you do not drive for twenty-four hours and you ask a friend or relative to drive you home following your procedure.

How soon can I return to work?

We recommend you do not undertake strenuous activity and rest for the remainder of the day.

What do I do if I feel unwell after I have gone home?

If you feel unwell after your procedure, you should seek medical advice from your GP/ hospital doctor or through the emergency department and inform them that you have had a procedure.

What should I do if the line falls out?

It is rare for a line to fall out because it is held in place by a cuff under your skin.

If it does happen, you should:

- Lie or sit down and quickly press on the site using a clean towel/ tissues
- Contact your local Haematology outpatient department or go to your nearest Accident and Emergency straight away.

How do I wash?

You can shower and have shallow baths but you must keep the area where the line has been put in and the line itself dry. Your dressings are splash-proof but do not get them wet or soak them. If you do, you need to get a new one put on at your local haematology outpatient department.

Can I exercise with a Hickman line?

Avoid strenuous exercise such as running or tennis because this can cause your Hickman line to come out.

You must not swim because you must not immerse your Hickman line in water.

Gentle exercise such as walking is ideal.

When and how will my Hickman line be taken out?

How long you have your Hickman line depends on your individual needs.

It will be taken out if:

- You no longer need it
- It becomes infected
- It becomes blocked or damaged.

It is usually taken out – and the entry and exit sites stitched – in the Haematology outpatient department by one of the Haematology doctors. You will have an appointment to have the stitches removed 7 – 10 days later.

Contacting the team

If you have any further questions about your procedure or an existing appointment, please contact the radiology department (**Monday to Friday, 8am to 6pm**) at **01279 82 2527 or 3405**

If you have any queries **outside of working hours (after 4pm and on weekends)**, you will be redirected to the main radiology reception.

Please note appointment bookings cannot be made during this time.

Your feedback matters

If you would like to give feedback on your care, please contact our patient experience team at paht.pals@nhs.net or **01279 827211**.

Please contact the communications team at paht.communications@nhs.net if you would like this leaflet in another language or format.

