

Hickman line insertion and caring for your line



Information for patients

This booklet explains how a Hickman line is put in, the benefits, the risks and the alternatives, as well as how to care for your line. If you have any more questions, please do not hesitate to speak to the nurses or doctors caring for you.

Confirming your identity

Before you have a treatment or procedure, our staff will ask you your **name** and **date of birth** and check your **ID band**. If you don't have an ID band we will also ask you to confirm your address.

If we don't ask these questions, then please ask us to check.

Ensuring your safety is our primary concern.

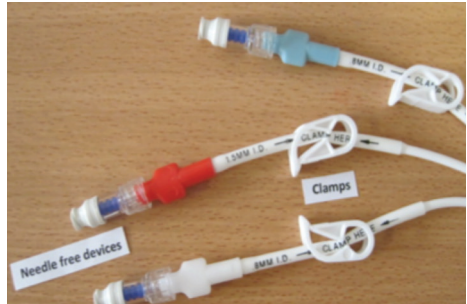
What is a Hickman line?

It is a long, thin silicone tube that is tunnelled under your skin and into a large vein in your chest. You have this procedure under local anaesthetic.

You can go home with it in and it can be left in place for weeks or months while you are having your treatment.

The line has two or three separate openings called lumen. These allow you to be given different treatments at the same time.

Each lumen is clamped with a clip midway along the line and then sealed with a needle-free device, a cap, a connector or a bung, to keep your line closed when it is not being used (see diagram on the right/above/below).



There is a small 'cuff' around the Hickman line. You can feel this under your skin, just above the area where it leaves your body (exit site). The cuff stops your line from falling out. It takes about three weeks for the tissue under your skin to grow around this cuff and hold your line in place.

You may also hear a Hickman line called a central line, a tunnelled line or a central venous access device.

Why do I need a Hickman line?

It is used to give medicines and treatments such as blood transfusions, chemotherapy and stem cells safely and reliably directly into your vein. It can also be used to take blood samples.



What are the benefits of having a Hickman line?

- You do not need to keep on having needles put in every time you have treatment.
- It can be very useful if doctors and nurses find it difficult to put a needle into your veins, or if the walls of your veins have been hardened by previous chemotherapy treatment.

What are the risks when having it put in?

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.

What are the risks after it has been put in?

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 Haematology outpatient department (out of hours, go to your nearest 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 local Haematology outpatient



department (out of hours, 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 (see 'What happens before the procedure', page 6.**

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 infection here.

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.

Radiation risk

- In order to be performed safely, your procedure requires the line to be inserted under x-ray guidance. X-rays are a type of ionising radiation. Studies have shown that people who have been exposed to high doses of ionising radiation have an increased chance of developing cancer many years or decades after they have been exposed. However, while more complex or difficult cases might require a slightly higher radiation dose, the radiation exposure associated with this procedure is very small.
- It is the assessment of your doctor and the radiology doctor who will be performing the procedure that the benefit of the procedure outweighs the risk from the exposure to radiation. The specialist radiologist and radiographer will ensure that your radiation exposure is kept as low as possible during the procedure.
- If you have any concerns about the risk of exposure to radiation during this procedure, you can discuss this further during the consent process with the radiologist who will be performing your procedure.
- Please notify the clinical team if you think you may be pregnant.



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

Consent

We must by law obtain your written consent to any operation and some other procedures beforehand. Staff will explain the risks, benefits and alternatives before they ask you to sign a consent form. If you are unsure of any aspect of the treatment proposed, please do not hesitate to speak with a senior member of the staff again.

How a Hickman line is put in

What happens before the procedure?

Blood clotting medications: if you are taking any medications that affect how your blood clots, or you have a history of abnormal bleeding, please tell your doctor or clinical nurse specialist when they confirm the date of your procedure. They may ask you to stop taking these for a short while before you have the line put in.

Preventing infection: we will give you an antibacterial liquid called Hibiscrub that you need to wash with instead of soap or shower gel the night before and on the morning of the procedure. This is an important step in reducing the risk of infection. Your procedure will be cancelled if you have not completed this step.



Eating and drinking: you will need to stop eating and drinking between four and six hours prior procedure. This can be discussed further with the team referring you for the line insertion.

Where will I have the procedure?

If you are having this as an outpatient procedure, please come to the Supportive Therapy Unit on the ground floor of the Cheyne Wing. You will then be taken to the Interventional Radiology (IR) department to have the line put in. This is because x-rays and ultrasound imaging are used to place your line in exactly the right place.

If you are an inpatient, you will be taken to the IR department to have your line put in.

What happens during the procedure?

The line will be put in by a specialist doctor called a radiologist. Before the procedure, they will explain the risks and benefits of the procedure and ask for your consent.

If you agree to go ahead with the procedure, a nurse will take you to the IR 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.

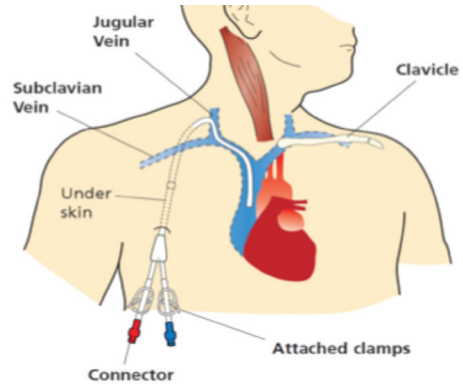
There will also be a radiographer in the theatre to control the x-ray imaging.

The doctor will find a suitable vein in your neck, near your collarbone, using an ultrasound machine. They will then use antiseptic 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 diagram above shows the position of the central line.

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

How long does the procedure take?

The procedure usually takes about 30 minutes.

What happens after the procedure?

After the procedure, you may be taken back to the Supportive Therapy Unit or back to your ward bed. If the procedure is being done as a day case, you can go home later that day after 2 hours of observation in Supportive Therapy. 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.

Looking after your Hickman line

On the day you have it put in

After your procedure you will return to the Supportive Therapy Unit for about 2 hours of observation prior to discharge home. Your nurse will arrange a further appointment for the following day to have your dressing changed and Hickman line flushed.

Every week

You will attend either King's or your local Haematology outpatients at least once a week to have your Hickman line cleaned and dressing changed, and to have new needle-free devices attached and flushed. This makes you less likely to get an infection and makes sure the line does not become blocked.

The bung on each of the lumens on your Hickman line is also changed once a week at the same time as the dressing.

How to minimise the risk of infection

- Take your temperature every evening, or at other times if you feel unwell. If it is above **38°C** you must seek medical help as soon as possible (see 'Infection', page 4). Shower or wash daily, making sure you keep the area where the line has been put in and the line itself dry.
- Do not touch or play with your Hickman line.
- Make sure your line is cleaned and the dressing changed each week.

What should I do if I have a problem with the dressing?

If you get a rash, or have blistering, itching or redness under the



dressing, tell your doctor or nurse. They can put on a different type of dressing.

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 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 seven – 10 days later.

Who can I contact with queries and concerns?

Haematology Day Treatment department, Monday to Friday, 8.30am – 8pm (Weekends and Bank Holidays 9.30-18.30)

Tel: **020 3299 4832** or **020 3299 2532**

Haematology registrar, out of hours

Tel: main switchboard, **020 3299 9000**, and ask for the on-call haematology registrar.

MyChart

Our MyChart app and website lets you securely access parts of your health record with us, giving you more control over your care. To sign up or for help, call us on **020 3299 4618** or email

kings.mychart@nhs.net. Visit **www.kch.nhs.uk/mychart** to find out more.

Sharing your information

King's College Hospital NHS Foundation Trust has partnered with Guy's and St Thomas' NHS Foundation Trust through the King's Health Partners Academic Health Sciences Centre. We are working together to give our patients the best possible care, so you might find we invite you for appointments at Guy's or St Thomas' hospitals. King's College Hospital and Guy's and St Thomas' NHS Foundation Trusts share an electronic patient record system, which means information about your health record can be accessed safely and securely by health and care staff at both Trusts. For more information visit **www.kch.nhs.uk**.



Care provided by students

We provide clinical training where our students get practical experience by treating patients. Please tell your doctor or nurse if you do not want students to be involved in your care. Your treatment will not be affected by your decision.

PALS

The Patient Advice and Liaison Service (PALS) is a service that offers support, information and assistance to patients, relatives and visitors. They can also provide help and advice if you have a concern or complaint that staff have not been able to resolve for you. They can also pass on praise or thanks to our teams.

PALS at King's College Hospital, Denmark Hill, London SE5 9RS

Tel: **020 3299 4618**

Email: **kings.pals@nhs.net**

If you would like the information in this leaflet in a different language or format, please contact our Interpreting and Accessible Communication Support on 020 3299 4618 or email kings.access@nhs.net