

Having a Hickman line insertion in the Interventional Radiology Department

The aim of this information sheet is to help answer some of the questions you may have about having a Hickman line insertion. It explains the benefits, risks and alternatives of the procedure as well as what you can expect when you come to hospital.

If you have any questions or concerns, please do not hesitate to speak to a doctor or nurse caring for you in the Interventional Radiology Department.

What is a Hickman line?

A Hickman line is a long, hollow tube made from silicone rubber that is inserted into one of your veins in the neck or under the collar bone.

The space in the middle of the tube is called the lumen. Sometimes the tube has two or three lumens. These lumens act like two or three separate intravenous (IV) lines. This allows different treatments to be given at the same time.

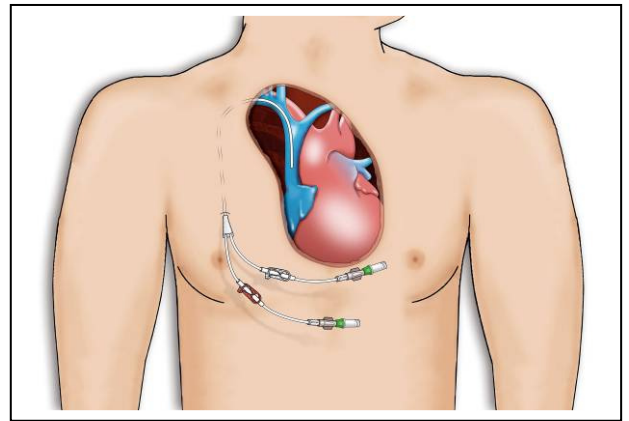
Part of the tube remains outside of the body. At the end of the tube outside the body each lumen has a special cap to which a drip line or syringe can be attached. Sometimes there is also a clamp to keep the tube closed when it is not being used.

You might hear a Hickman line referred to as a 'line', 'central line' or 'tunnelled line'.

What are benefits of having a Hickman line?

A Hickman line is a reliable way for nurses and doctors to give you intravenous medicines (medicines that need to go directly into a vein), nutrients or to take blood samples. It means you can avoid needle puncture every time you have treatment, which can be uncomfortable and stressful. Some medications need to be given into a large vein rather than small vein in the hand/arm.

Doctors recommend the use of a Hickman line for patients who regularly have chemotherapy, long-term antibiotics and infusions. It can remain in place for a long period of time so it can be used throughout your treatment.



Are there any alternatives?

One alternative would be a repeated needle puncture to the vein every time you have treatment by using a small tubing (cannula) in accessing a small vein (usually arm/hand) for each treatment. New cannula needs to be placed and removed each time. This might not be suitable for some medications and also not practical if you require daily infusions for a long period of time.

A second alternative, another type of central vascular access device, for example a PICC line, might be used. It has advantages and disadvantages comparable to a Hickman line. Please talk to your doctor or nurses if you would like more information about these alternatives.

Are there any risks?

Serious risks and complications of having a Hickman line inserted are very rare. However, as with any procedure, some risks or complications may occur. For example:

- **Bruising.** This is quite common and will normally settle a few days after the procedure.
- **Infection.** The insertion procedure will be carried out in a sterile condition to eliminate or reduce any sources of infection. However, infection may still occur from local infection of the skin or from within the bloodstream at any time while your line is in place. Infections can usually be treated with antibiotics. However in rare cases we may have to remove the line.
- **Lung puncture.** This happens when the lung is accidentally punctured during the procedure. This is a very rare complication and can happen in 1 in every 1000 patients. If this occurred, we may have to keep you in hospital for a few days until the lung had healed.
- **Hickman line problems.** A lumen or lumens of your line can become blocked. Regular flushing helps to prevent this. If it becomes blocked sometimes it is possible to unblock it. If the line is in place for a long time, breaks and damages can occur, although this is rare. The line may need to be replaced for these reasons. Thrombosis/ clots in veins usually does not cause any problems, rarely prevent blood being taken from the line.

The radiologist will discuss the possible risks with you before you have the procedure. Please ask them if you have any concerns or would like any further information.

What do I need to do to prepare for the procedure?

You can come into hospital, have a Hickman line inserted and go home the same day.

- You will usually need to have a **blood test** to measure full blood count) and clotting before the procedure. Your doctor or clinic nurse specialist will tell you how to arrange it when they recommend a Hickman line.
- If you are currently receiving chemotherapy, a blood test is needed close to the time of the procedure. If you are not currently on chemotherapy a blood test within eight weeks of the procedure is fine.
- Please let us know if you are taking any **antiplatelet medicines** (for example, aspirin, clopidogrel) or any **medicines that thin the blood** (for example, warfarin, rivaroxaban), as these may need to be withheld temporarily before the procedure. Call the Interventional Radiology Department for advice as soon as you get your appointment letter on **020 7188 5573** (for Guy's Hospital) or **020 7188 5477** (for St Thomas' Hospital).
- Take your other medicines as normal, unless your doctor or nurse tells you not to.
- You must **stop eating six hours before the procedure.** We may need to give you a sedative medicine, which may make you feel sick if you have just eaten. You may drink water up to two hours before the procedure.
- Please arrive **30 minutes before** your appointment to allow enough time for preparation.

You will need a responsible adult to take you home by private transport. We do not recommend that you use public transport as it is unsafe if you feel unwell.

What happens before the Hickman line insertion?

After you have arrived at the Interventional Radiology (IR) Department, you will be examined and assessed by a radiology nurse and given a hospital gown to wear. A small plastic tube (cannula) will be inserted into a vein in your arm. This means that we can give you a sedative (medicine to help you relax) during the procedure, if you need it.

You will be seen by an interventional radiologist (a doctor who uses imaging machines to diagnose and treat illnesses) who will discuss the procedure with you. You will be given the opportunity to ask any questions you have.

Giving my consent (permission)

The staff caring for you will ask your permission to perform the procedure. If you decide to go ahead, you will be asked to sign a consent form that says you have agreed to the procedure and that you understand the benefits, risks and alternatives. If there is anything you don't understand or you need more time to think about it, please tell the staff caring for you.

You should have received a copy of the leaflet, **Helping you decide – our consent policy**. If you have not, please ask a member of staff for a copy.

Remember, it is your decision. You can change your mind at any time, even if you have signed the consent form. Let staff know immediately if you change your mind. Your wishes will be respected at all times.

How is the Hickman line inserted?

You will be taken into the IR theatre, and asked to lie on the table. The radiologist will inject some local anaesthetic into your skin on your chest and neck to numb the area. This may sting a little as it goes in and then go numb. After this you should only feel pressure not pain. Throughout the procedure a nurse will be with you to monitor your pulse and blood pressure.

Your neck will be checked for a suitable vein using a small ultrasound machine. The area where the line is to be inserted is cleaned with an antiseptic fluid and you will be covered with a sterile drape.

A small cut is made in the skin near your collarbone and the tip of the tube is threaded into a large vein. This is known as the insertion site. The tube is then pushed under the skin from the neck to the chest to reach the exit site where a second small incision is made. The exit site is the place where the tube comes out of your body.

After the line has been put in you will have a chest x-ray using the imaging machines around you to make sure it is in the right place. The doctor will then put stitches in the skin to hold the Hickman line in place and a waterproof dressing will be placed over the line.

There is a small 'cuff' around the Hickman line which can be felt under the skin just above the exit site that prevents it from falling out. The tissue under the skin grows around this cuff over a period of about three weeks and holds the line safely in place. Until this has happened you will have a stitch holding the line in place.

Will I feel any pain?

Most patients have “conscious sedation”. This involves us giving you two medications through your cannula to relax you and ease your pain. This often causes you to forget most of the procedure afterwards. However you are awake enough during the procedure to breathe for yourself and communicate with the staff.

As you are given a local anaesthetic, you should not feel any pain during the procedure. You may however feel some pain or discomfort after the procedure when the local anaesthetic wears off. You may want to take paracetamol tablets for the pain. You may also have a little bruising.

What happens after the Hickman line insertion?

After the Hickman line placement you will initially stay in the radiology recovery room for about two – four hours. Your blood pressure and pulse will be measured frequently at first and then at regular intervals and a clip on your finger will measure the oxygen level in your blood. This is not painful.

We will provide light refreshment, such as tea or coffee, a sandwich and some fruit. If you have any special dietary requirements, you may wish to bring some food and drink with you.

The nurse will tell you when you can get up and move around. You will need a responsible adult to take you home by private transport and stay with you overnight. We do not recommend that you use public transport as it is unsafe if you feel unwell.

Taking care of your Hickman line at home

- **Showering.** Use a waterproof dressing over the tubing as this will usually keep it dry during a shower. We will provide some dressing and advice how to use them after you leave hospital. You will generally need a dressing for the first two weeks after the insertion. Afterwards, you only need a one when showering to keep it dry.
- **Having a bath.** Bathwater is not as clean as shower water so if you have a bath please make sure that you keep the exit site out of the water e.g. by sitting in a shallow bath.
- **Sports.** Sports like tennis, golf or strenuous gym exercises should be avoided. There is a risk your Hickman line could become dislodged due to a lot of upper body movement. Your doctor/nurse can advise you about other sports which are acceptable.
- **You can't swim with your Hickman line in situ.**

Keeping your Hickman line working

The Hickman line can be used as soon as it is inserted. If your line is not always being used, the plastic clamp must stay closed. **Remember** to check it is closed every day and that the stopper on the end is securely attached.

Flushing your line regularly will also help to prevent it becoming blocked. We recommend your line is flushed once a week. The stops at the end of your line should be changed at the same time (weekly) This will be done in the ward or day unit where you get your treatment. The day unit or ward nurses can teach you, a family member or friend how to flush your line at home if required.

Alternatively, a district nurse can be asked to see you at home to change the dressing and flush the line, especially on the weeks you cannot come to the hospital. Please talk to your nurse specialist on the ward/ day unit to arrange this.

How will I know if something is wrong with my Hickman line?

If you experience a cold and shivery attack during or after flushing your line, **contact the doctor or nurse caring for you immediately**. This could be due to an infection in the line. The line is in a large vein close to your heart so it is important to treat any infection as soon as possible.

You should also contact the hospital straight away if:

- you experience pain, redness or swelling in your arm or neck on the same side of the body as your line
- the cuff or line has moved
- you feel breathless
- your line becomes damaged or develops a leak.

How is the Hickman line removed?

When you no longer need the Hickman line it will be taken out. A doctor or nurse specialist delivering your treatment will do this for you, or you might return to the IR Department for a removal.

The nurse or doctor performing the procedure will give you all the information you need if any preparation is required.

It is usually a very quick procedure. You will be asked to lie on a bed. The area around the cuff is cleaned with antiseptic fluid and numbed with local anaesthetic. A small cut is made to gently release the cuff and the line is then removed slowly. No stitches are required. This can feel uncomfortable, but it should not be painful. Patients don't usually need sedation.

A dressing will be put over the exit site and you will be asked to remain lying down (for about 10 minutes) until it is certain that there is no bleeding. When you feel ready you will be asked to sit up and get dressed. You will be returned to your ward if you are an inpatient (staying in hospital overnight) or you will be able to go home if you came in as an outpatient (leaving the hospital the same day you have the procedure).

Contact us

Please contact the Interventional Radiology Department at Guy's Hospital on 020 7188 5573 or St Thomas' Hospital on 020 7188 5477, Monday to Friday, 9am to 5pm, if you have any questions or concerns about this procedure.

Out of hours, go to your local hospital's A&E.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.guysandstthomas.nhs.uk/leaflets

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

t: 020 7188 8748 9am to 5pm, Monday to Friday

Patient Advice and Liaison Service (PALS)

To make comments or raise concerns about the Trust's services, please contact PALS. Ask a member of staff to direct you to the PALS office or:

e: 020 7188 8801 at St Thomas' **t:** 020 7188 8803 at Guy's **e:** pals@gstt.nhs.uk

Knowledge & Information Centre (KIC)

For more information about health conditions, support groups and local services, or to search the internet and send emails, please visit the KIC on the Ground Floor, North Wing, St Thomas' Hospital.

t: 020 7188 3416

Language support services

If you need an interpreter or information about your care in a different language or format, please get in touch using the following contact details.

t: 020 7188 8815 **fax:** 020 7188 5953

NHS Direct

Offers health information and advice from specially trained nurses over the phone 24 hours a day.

t: 0845 4647 **w:** www.nhsdirect.nhs.uk

NHS Choices

Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

w: www.nhs.uk

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To join, please call 0848 143 4017, email members@gstt.nhs.uk or visit www.guysandstthomas.nhs.uk

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