

# Hickman line insertion in the interventional radiology department

This leaflet explains more about what a Hickman line is, how it is inserted into the body and why your doctor has recommended this for you.

If you have any questions or concerns not answered by this leaflet, please contact the Interventional Radiology (IR) department on 020 7188 5525 for Guy's Hospital, or 020 7188 5477 for St Thomas' Hospital.

## What is a Hickman line?

A Hickman line is a long, flexible plastic tube that is inserted underneath the chest wall skin and into the large vein draining into the heart (see picture). A Hickman line is a type of tunnelled central line.

The space in the middle of the tube is called the lumen. Hickman lines can have one, two or three lumens. These allow different medications to be given at the same time, although the external line diameter is the same. Your Interventional Radiologist (IR) doctor will decide how many lumens your line needs.

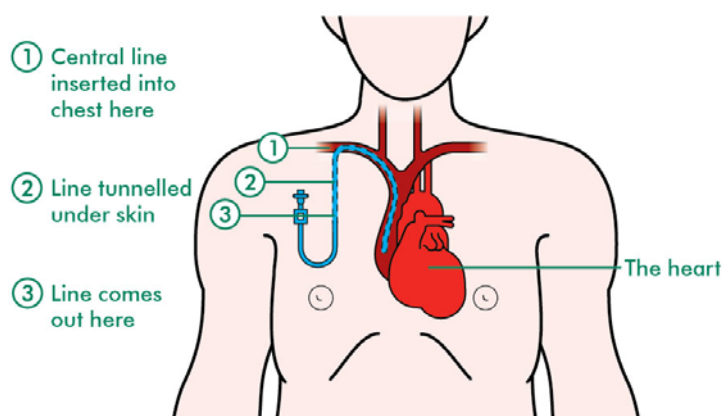


Illustration reproduced with permission from Macmillan Cancer Support.

Part of the Hickman line tube remains outside of the skin so that nurses can use the line to give medications or take blood samples. Usually the external part of the line can be hidden by clothes (or bra) so that people will not know that you have a line in place.

## How is a Hickman line inserted?

A Hickman line is inserted by a specialist doctor called an Interventional Radiologist (IR). A Hickman line insertion is a minor surgical procedure, performed in the IR theatre, usually under local anaesthetic (i.e. you will be awake but will feel only minimal discomfort). You need to lie flat for around 30-40 minutes for the procedure.

At least two specialist IR nurses, as well as the radiographer and IR doctor will be with you during the procedure to check that you are comfortable and safe. Two small cuts are made

once the skin is numb. One on the chest wall where the line will come out, and a second small cut in the neck or around the collarbone where the line goes into the vein. The second cut will be closed with a single stitch.

The procedure is performed using ultrasound (to help identify a suitable large vein) and a special x-ray machine (to check that the line tip is in the right place). These machines make the procedure very safe and avoid the need for large cuts.

## What are benefits of having a Hickman line?

A Hickman line is a reliable way for nurses and doctors to give intravenous medicines (medicines that need to go directly into a vein), nutrients (e.g. TPN) or to take blood samples. Having a Hickman line means you avoid having a new needle puncture every time you need treatment or a blood test. The Hickman line is meant to remain in place for a long time (months to years) so it can be used throughout your treatment.

Doctors recommend the use of a Hickman line for patients who regularly have chemotherapy, long-term antibiotics, total parenteral nutrition (TPN) or difficulty with venous access. Some medications need to be given directly into a large vein rather than small vein in the hand or arm to prevent irritation.

## Are there any risks of having a Hickman line?

Serious risks and complications of having a Hickman line inserted are very rare. However, as with any procedure, there are some risks and complications which you should be aware of.

- **Infection:** The insertion procedure will be carried out in sterile conditions. It is very important that the Hickman line is kept clean, otherwise any infection can get directly into the blood stream. This will require treatment with antibiotics and often the line will need to be removed.
- **Lumen blockage:** Your line needs regular care to keep it working normally. If it is not looked after, then one or more of the lumens can become blocked and stop working. If the line gets blocked or breaks and does not work, it will need to be removed and replaced.
- **Scarring:** Hickman line insertion requires at least two small (~4 mm) cuts in the skin. These will heal as small scars.

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.

## Will I feel any pain?

A Hickman line is a minor procedure for most patients. It is usually performed using local anaesthetics to numb the skin in the neck and chest. Because you are awake during the procedure, you can communicate directly with the staff. This also reduces your recovery time so that most patients can eat and drink shortly after the procedure. The line will be ready to use straight away. Additional simple analgesics (like paracetamol) can be used if you are uncomfortable.

## Are there any alternatives?

A Hickman line is a voluntary procedure. Alternatives are to have a temporary line placed every time you have your treatment. This new line needs to be placed and removed each time before you leave hospital. Having new lines placed can be painful (and time consuming). Also

temporary lines might not be suitable for some medications and are not practical if you require infusions over a long period of time.

A second alternative is to have a PICC line (peripherally inserted central catheter). PICC lines usually go in the arm, but they are smaller in size and may not be suitable for all medications. PICC lines block more easily than Hickman lines and a PICC may cause the vein in your arm to clot. Please talk to your doctor or nurses if you would like more information about these alternatives.

## Giving my consent (permission)

We want to involve you in decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the treatment and you understand what it involves. If you would like more information about our consent process, please speak to a member of staff caring for you.

## Before your procedure

We will arrange for you to have some simple blood tests. The IR doctor needs to see a list of all of your medications (tablets, inhalers, creams), so please bring a copy of your current prescription with you.

Certain medicines will need to be stopped before your procedure. The IR doctor or nurse will advise you on whether you need to stop any medicines. These medicines can be restarted after your line insertion – but the IR doctor or nurse will advise you on this.

## What happens on the day of your procedure?

- On the day of your procedure, do not eat or drink anything (except water) for six hours before the procedure. You can drink water up to two hours before the procedure. Eating and drinking before your procedure will cause delays to your procedure.
- Please arrive 45 minutes before your appointment time to allow sufficient time for preparation. You will need to get changed into a hospital gown and the IR doctor will go through your medications again with you.
- You will be asked to sign a hospital consent form, agreeing to have the procedure. You can ask any questions that you have.
- At least one family member or friend (maximum of two please) should accompany you to the hospital and they should be able to keep an eye on you for 24 hours afterwards.
- If you come to hospital with family or friends, they can wait with you before and after the procedure. Family or friends cannot be with you during the procedure, but you will be with the IR nurses and doctors at all times.

## What happens after the Hickman line insertion?

- After your procedure, you will need to rest in the Interventional Radiology Department for two to four hours. This is to make sure that there are no problems. The IR nurse will let you know when you can eat, drink and mobilise after your procedure. If all of your checks are normal, then you can go home.
- You will need a responsible adult to take you home by car or taxi. We do not recommend using public transport, in case you feel unwell. If you need to arrange hospital transport, please call **020 7188 2888**.
- We recommend that you have an adult stay with you overnight.
- Do not drive for 24 hours after the procedure and not until you feel safe to drive.
- Avoid any strenuous exercise or lifting for 48 hours after the procedure.

- Simple painkillers (like paracetamol) might be useful for any post procedure discomfort.
- Continue with your normal medication as usual.

## 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 dressings and advice on 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 to keep it dry whilst showering.
- **Having a bath:** Submerging the line underwater is not advised, due to risk of infecting your line. However, having a shallow bath and keeping the line out of the water is fine.
- **Sports:** We strongly advise you to avoid swimming and having saunas. Otherwise, as long as you are careful, most other activities are fine.

## Keeping your Hickman line working

We recommend that each lumen of your Hickman line is flushed once a week to stop it becoming blocked. The plastic bungs on the ends of the line should be changed 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?

Once you have a Hickman line, you need to be vigilant for signs of serious infection. 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 your doctor or nurse if:**

- Your line gets damaged or develops a leak/crack/split
- You develop any redness around the line site on the skin
- You notice your line become loose at the skin. We want to avoid the line from falling out.

## How is the Hickman line removed?

When you no longer need the Hickman line it will be taken out in the IR Department. The nurse or doctor performing the procedure will give you all the information you need if any preparation is required.

Removing a Hickman line is usually a very quick procedure, compared with inserting a Hickman line. It is performed under local anaesthetic only. No stitches are required.

## Useful sources of information

### Macmillan Cancer Support

For further information on central lines visit: [www.macmillan.org.uk/information-and-support/treating/chemotherapy/being-treated-with-chemotherapy/central-lines.html#45751](http://www.macmillan.org.uk/information-and-support/treating/chemotherapy/being-treated-with-chemotherapy/central-lines.html#45751)  
**t:** 0808 808 0000 **w:** [macmillan.org.uk](http://macmillan.org.uk)

## Contact us

If you have any questions or concerns about this procedure, please contact the Interventional Radiology Department at **Guy's Hospital** on **020 7188 5525** or **St Thomas' Hospital** on **020 7188 5477** (Monday to Friday, 9am to 5pm).

If you have a significant medical problem out of hours, then contact your GP in the first instance. If it is an emergency, call 999 for an ambulance.

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

## Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

**t:** 020 7188 8801 (PALS)      **e:** [pals@gstt.nhs.uk](mailto:pals@gstt.nhs.uk)

**t:** 020 7188 3514 (complaints)      **e:** [complaints2@gstt.nhs.uk](mailto:complaints2@gstt.nhs.uk)

## Language and accessible support services

If you need an interpreter or information about your care in a different language or format, please get in touch:

**t:** 020 7188 8815      **e:** [languagesupport@gstt.nhs.uk](mailto:languagesupport@gstt.nhs.uk)

## NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

**t:** 111

## 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](http://www.nhs.uk)

## Get involved and have your say: become a member of the Trust

Members of Guy's and St Thomas' NHS Foundation Trust contribute to the organisation on a voluntary basis. We count on them for feedback, local knowledge and support. Membership is free and it is up to you how much you get involved. To find out more, and to become a member:

**t:** 0800 731 0319      **e:** [members@gstt.nhs.uk](mailto:members@gstt.nhs.uk)      **w:** [www.guysandstthomas.nhs.uk/membership](http://www.guysandstthomas.nhs.uk/membership)

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