Care of your peripherally inserted central catheter
A guide for patients and their carers

We care, we discover, we teach
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What is a PICC?

A PICC is a peripherally inserted central catheter. It is a thin flexible tube that is inserted into a vein in the upper arm. The PICC is then threaded along the vein so that the tip lies in one of the large veins in the chest. A specially trained nurse or doctor will insert your PICC. Not all patients are suitable for a PICC, so a doctor or nurse will assess you before one is inserted.

The illustration below shows the PICC line, and where it enters the vein at the inside of the upper arm.

How is it put in?

The doctor or nurse will inject a local anaesthetic to numb the area where the line is to be inserted. The procedure usually takes about 30 minutes. Occasionally it may be difficult to
thread a PICC line. However, most people do not find the procedure painful or uncomfortable.

After your PICC is inserted, you will have a chest x-ray to confirm that your line is in the correct position.

The PICC will be held in place with an adhesive dressing and covered with a clear, waterproof dressing.

What are the benefits of having a PICC line?

- A PICC can be used to give chemotherapy, anti-cancer drugs, fluids, antibiotics and other drugs directly into the vein. It can also be used for taking blood samples.
- PICC lines are inserted when a central line is needed for short term use.
- They are ideal for people who have small veins which are difficult to find or access, or for people who are very anxious about needles.
- A PICC is sometimes used temporarily for people who should ideally have a tunnelled central venous catheter but are not able to have one because, for example, they are on blood thinning therapy such as warfarin or aspirin, have abnormal blood count results, or are unable to lie flat. In this situation, a PICC means treatment can be started without delay.

Are there any alternatives to a PICC line?

If you do not have a suitable vein for a PICC line, a tunnelled central venous catheter or a TIVAD (totally implantable vascular access device) may be considered. Your doctor or nurse specialist will discuss the options with you.
What will happen if I decide not to have a PICC line?

For some treatments, it may be possible to have chemotherapy into a vein in the hand. In most cases, you would then have to be admitted to hospital for the treatment. Some chemotherapy, however, can only be given via a central line, so you would need to discuss treatment options with your doctor.

What are the risks of PICC insertion?

As with most procedures there is a small risk of complications which may include:

- infection – there is a small risk of infection after having a PICC inserted
- the catheter tip in the vein may not be in the correct position and sometimes needs to be adjusted into a better position.
- bleeding and some bruising around the insertion site, especially in people whose blood does not clot normally
- accidental puncture of the artery which may cause bleeding
- nerve damage - during the procedure you may feel a shooting pain down you’re arm if the needle touches a nerve.

Please make sure you have answers to all your questions before you consent to the procedure. If you have any problems or queries, please contact one of the procedure team nurses on 0161 446 3916.
Who will care for it?

While you are in hospital, the nursing staff will look after your PICC. This involves:

- cleaning the exit site and applying a new dressing weekly
- flushing the line weekly to prevent blocking when it is not in use.

When you leave hospital, we will contact the district nurse in your area to call at your home to flush your line. We will also give the district nurse a letter outlining how to care for your PICC and all the equipment needed for the first flush. If you have any problems at home, please ring The Christie using the numbers at the end of this booklet.

Please note: If you experience a cold and shivery attack during or after flushing your line, contact The Christie immediately as this could be the beginning of an infection. Phone The Christie Hotline on 0161 446 3658.

If you have an infusor connected continuously to your PICC, the line will require flushing after it empties. For further information, see ‘The Baxter Infusor - A Patient’s Guide’.

How will I know if something is wrong?

Sometimes problems can occur while you have a PICC line. If you suspect something is wrong, or if you have any of the following, contact the hospital straightaway:

- if you have a temperature above 37.5°C, fever, chills or feel generally unwell. This could be the beginning of an infection
- oozing from around the line
- cracks or leaks in the line
- pain, redness or swelling around the site, in your neck or arm - this could be sign that the line tip has moved and a blood clot has formed in one of the veins.
- if your PICC becomes dislodged.

If you are worried about any aspect of your PICC or its appearance, please do not hesitate to contact The Christie Hotline on 0161 446 3658.

Frequently asked questions

Can I eat and drink before having my PICC inserted?
We recommend a light diet before having your PICC inserted.

Can I have a bath or a shower and swim?
As a general rule, we encourage people with PICCs to take a shower rather than a bath because of the risk of infection if the PICC is submerged in bathwater. **Please remember to continue to use an antibacterial body wash (for example, Hibiscrub) to bathe or shower and wash your hair until the line is removed.**

Can I lead a normal social life?
Having a PICC in place should not interfere with your social life. However, having chemotherapy may mean that you do not feel like certain social activities immediately after treatment or if your blood counts are low. Your nurse or doctor will give you more specific information.

Can I play sports?
Sports such as tennis and golf or vigorous gym exercises are discouraged. There is a risk that your PICC could become dislodged because of excessive upper body movement.
However, there are many other pursuits which are acceptable. If in doubt ask your nurse or doctor.

**Will my PICC affect my sex life?**

Having a PICC in place should not interfere with your sex life. To minimize the risk of damage to your PICC, ensure it is secure before making love. However, sometimes while you are feeling unwell or having cancer treatment you may lose interest in sex.

Adequate barrier contraception is essential during cancer treatment to avoid pregnancy because of the risk of damage to the baby.
Information for district nurses:

Please identify if it is an open-ended or clamped PICC and follow the correct procedure.

PLEASE REMIND PATIENTS TO CONTINUE TO USE AN ANTIBACTERIAL BODY WASH (E.G. HIBISCUS) TO BATHE OR SHOWER AND WASH THEIR HAIR UNTIL THE LINE IS REMOVED

Potential PICC complications

The patient should be monitored for the following potential complications:

- **Bleeding from insertion site**
  If this occurs, apply pressure at insertion site for 5 to 10 minutes. Observe the site. If the bleeding persists, call The Christie Hotline.

- **Bruising at insertion site**
  Related to vein trauma at insertion. Monitor for changes.

- **Inflammation, oedema and/or tenderness above site**
  This may be related to trauma and possible chemical or dressing reactions and may involve the upper region of the arm. Change dressing to another occlusive type and monitor. If problems persist, please contact The Christie Hotline (0161 446 3658) for advice.

- **Mechanical phlebitis**
  This is inflammation of the vein caused by the body’s response to the catheter. This may occur more commonly during the first 7 days post insertion, but may be a delayed response. Please contact The Christie Hotline (0161 446 3658) for advice.

- **Thrombosis**
  A blood clot may develop. Signs of this include pain, swelling and discomfort in the neck or arm on the side the catheter is placed.
Procedure for flushing and dressing a PICC without a clamp

The tip of the lumen is positioned in the superior vena cava and requires a strict aseptic technique or ANTT whenever accessing or dressing the device. The end of the PICC line usually exits the body on the upper arm.

This PICC differs from tunnelled central venous catheters in that they have a pressure sensitive valve at the internal end which allows fluid to be injected into the catheter and blood to be withdrawn. When not in use the valve remains closed, thus preventing blood from flowing back into the catheter and air entering the venous circulation. Clamps or switches are not required.

The PICC will require a weekly flush with 10mls of normal saline 0.9%, change the dressing and statlock. Heparinised saline is not required for flushing this device. The procedure for flushing and dressing the PICC is outlined below.

Dressing materials required:
- Sterile dressing pack (containing gloves)
- Chlorhexidine Gluconate 2% and isopropyl alcohol 70%. (Chloraprep is recommended)
- Steri-strips and statlock if sutures are not in place
- 2 large IV 3000 dressings (10cm x 14cm) or transparent occlusive dressing

Wash and dry hands thoroughly. Open sterile dressing pack and place all other equipment onto the sterile field.

Loosen and very carefully remove the soiled dressing ensuring the PICC remains secured by the STATLOCK. Take care not to pull the PICC out further than the original insertion length. Inspect site for signs of tenderness, inflammation and/or swelling.

Wash or gel hands again and put on gloves. Clean the exit site using Chlorhexidine Gluconate 2% and isopropyl alcohol 70%. Chloraprep is recommended, allow to air dry.

Replace the STATLOCK and occlusive dressing. Please remember to use the skin prepagent in the Statlock packet to protect the patient’s skin.
flushing

- sterile dressing pack (containing gloves)
- 2 x large wipes of chlorhexidine gluconate 2% and isopropyl alcohol 70%. e.g. Sani - cloth
- 10mls syringe x 2 (for each separate lumen).

please use Luer lock for high risk patients

- green needle
- 10mls of normal saline 0.9% (for each separate lumen)
- sterile bung (one for each lumen) - small white bungs only please

1. wash or gel hands and open sterile dressing pack.
2. draw up 10mls normal saline 0.9% or use pre-filled saline syringe (for each separate lumen) and place on corner of opened dressing pack protecting key parts.
3. open and place all other equipment onto sterile field protecting key parts.
4. put on gloves. remove and discard the bung. take sterile chlorhexidine wipe and thoroughly clean the hub end of the line for at least 30 seconds using 3 parts of the wipe and allow to air dry for 30 seconds.
5. attach an empty 10mls syringe to end of line and withdraw 10mls of blood slowly. disconnect syringe and discard into sharp's bin.

**If you are not able to withdraw blood attach a new sterile bung and contact The Christie for advice. Please see algorithm**

6. to flush the line, attach the saline syringe and flush in **using push pause technique**.
7. attach a new small white sterile bung.

**Please note: Before chemotherapy is administered via a central line, blood must always be withdrawn to ensure that the tip of the line remains in the vein.** For queries related to chemotherapy please ring **The Christie Hotline on 0161 446 3658**.

If you have any queries or concerns about any aspect of care and maintenance of PICCs or if you would like to observe this procedure at The Christie (Monday to Friday from 0900-1600) please contact the procedure team on 0161 446 3916
Information for district nurses:

Procedure for flushing and dressing an open-ended PICC with a clamp

Nursing care following PICC placement

PLEASE REMIND PATIENTS TO CONTINUE TO USE AN ANTIBACTERIAL BODY WASH (E.G. HIBISCRUB) TO BATH OR SHOWER AND WASH THEIR HAIR UNTIL THE LINE IS REMOVED

This PICC will require a weekly flush with 10mls of normal 0.9% saline and 5mls of Hepsal, (10 units per ml) and a dressing change at least weekly or as required. The procedure for flushing and dressing the PICC is outlined below.

Dressing materials required:

- Sterile dressing pack (containing gloves)
- Chlorhexidine Gluconate 2% and isopropyl alcohol 70%. (Chloraprep is recommended)
- Steri-strips and statlock if sutures are not in place
- 2 large IV 3000 dressings (10cm x 14cm) or transparent occlusive dressing

Wash and dry hands thoroughly. Open sterile dressing pack and place all other equipment onto the sterile field.

Loosen and very carefully remove the soiled dressing **ensuring the PICC remains secured by the STATLOCK**. Take care not to pull the PICC out further than the original insertion length. Inspect site for signs of tenderness, inflammation and/or swelling.

Wash or gel hands again and put on gloves. Clean the exit site using Chlorhexidine Gluconate 2% and isopropyl alcohol 70%. **Chloraprep** is recommended, allow to air dry.

Replace the STATLOCK and occlusive dressing. Please remember to use the skin preparent in the Statlock packet to protect the patient’s skin.
**Flushing**

- Sterile dressing pack (containing gloves)
- 2 x large wipes of Chlorhexidine Gluconate 2% and isopropyl alcohol 70%. e.g. Sani - cloth
- 10mls syringe x 2 (for each separate lumen).

Please use Luer lock for high risk patients

- Green needle
- 10mls of normal saline 0.9% (for each separate lumen)
- 5mls heparinised sodium chloride 10 units per ml e.g. Hepsal (for each separate lumen)
- Sterile bung (one for each lumen) - Small white bungs only please

1. Wash or gel hands and open sterile dressing pack.
2. Draw up 10mls normal saline 0.9% or use pre-filled saline syringe (for each separate lumen) and place on corner of opened dressing pack protecting key parts.
3. Open and place all other equipment onto sterile field protecting key parts.
4. Put on gloves. Remove and discard the bung. Take sterile Chlorhexidine wipe and thoroughly clean the hub end of the line for at least 30 seconds using 3 parts of the wipe and allow to air dry for 30 seconds.
5. Attach an empty 10mls syringe to end of line and withdraw 10mls of blood slowly. Disconnect syringe and discard into sharp’s bin.

**If you are not able to withdraw blood attach a new sterile bung and contact The Christie for advice. Please see algorithm**

6. To flush the line, attach the saline syringe and flush in using push pause technique. Disconnect and attach a 10ml syringe with 5mls of Hepsal and flush, again using push pause technique.
7. Attach a new small white sterile bung.

**Please note:** Before chemotherapy is administered via a central line, blood must always be withdrawn to ensure that the tip of the line remains in the vein. For queries related to chemotherapy please ring The Christie Hotline on 0161 446 3658.

If you have any queries or concerns about any aspect of care and maintenance of PICCs or if you would like to observe this procedure at The Christie (Monday to Friday from 0900-1600) please contact the procedure team on 0161 446 3916
For problems or queries about your central line, please contact the Procedure Team on:

0161 446 3916
(9am – 5pm)
Out of hours please ring The Christie Hotline

If anything unusual occurs, or you are at all worried, contact:

The Christie Hotline
0161 446 3658
the line is open 24 hours a day

We try to ensure that all our information given to patients is accurate, balanced and based on the most up-to-date scientific evidence. If you would like to have details about the sources used please contact Patient.Information@christie.nhs.uk
Visit the Cancer Information Centre:
The Christie at Withington Tel: 0161 446 8100
The Christie at Oldham Tel: 0161 918 7745
The Christie at Salford Tel: 0161 918 7804
Open Monday to Friday, 10am to 4pm.
Opening times can vary, please ring to check before making a special journey.

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The Christie Patient Information Service
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