

## Central Venous Access Devices Team

# The Peripherally Inserted Central Catheter (PICC)

### About your line:

#### Introduction

It has been recommended that you have a Peripherally Inserted Catheter (PICC) inserted, as part of the care you are receiving. You may also hear this device referred to as a Central Venous Access Device. The practitioner inserting the device will explain the procedure and any potential problems to you. This leaflet aims to provide supporting information about the procedure and the future care of your device.

If you have any worries or require further information please ask the staff caring for you.

#### What is a PICC?

A PICC is a thin flexible tube that is inserted into a vein, usually above the bend of your arm. The PICC is then threaded along the vein so that the tip lies in one of the large (central) veins in the chest. It is used for giving fluids or medications without having to use a needle.

Your PICC will usually stay in place for the length of your treatment, however it can remain in for several months. You may even be able to go home with your PICC still in.

#### How is it put in?

A specially trained doctor or nurse 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 insertion of the PICC is not an operation, but the person inserting it will treat it as a very clean procedure. They will wear a sterile gown and gloves and prepare sterile equipment. The line may be inserted in the operating theatre, x-ray department, or outpatient department.

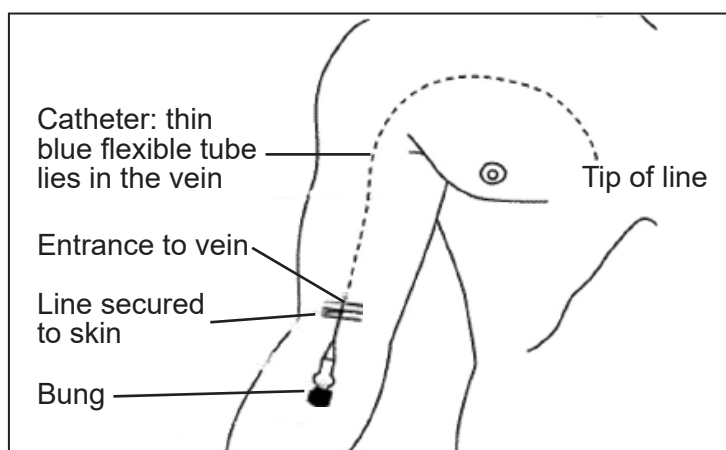
Local anaesthetic may be used to numb the area where the line is to be inserted. The PICC is inserted through a needle; and the needle is removed once the PICC is inserted.

The procedure should take approximately 40 minutes. Occasionally it may be difficult to thread the PICC, 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. Once the x-ray has been checked your treatment can start. Sometimes specialist equipment can be used to establish that the PICC is in the correct position and will replace the need for an x-ray.

The PICC will be held in place with an adhesive locking device (Statlock) or a subcutaneous stabilisation device (secureacath) and covered with a clear, waterproof dressing.

The illustration below shows the PICC line, and where it enters the vein, usually above the elbow.



## What are the benefits of a PICC line?

A PICC can be used to give chemotherapy, 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 a few weeks.

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.

## What are the risks of PICC line insertion?

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

**Infection** – The catheter is a direct route into your body and there is a small risk of infection after having a PICC inserted. We always take great care when inserting the line and when cleaning and flushing the line. Even so, infections can happen at any stage. Often we can treat the infection with antibiotics, but sometimes we need to remove the PICC to prevent the infection from getting any worse.

**Incorrectly placed catheter** – The catheter tip in the vein may not be in the correct position. About 1 in 20 patients need to have a catheter adjusted into a better position.

**Bleeding or bruising** – As with any procedure that involves the insertion of a needle into a vein, some bleeding or bruising around the insertion site may occur. This may occur especially in people whose blood does not clot normally.

**Blood clot** – On rare occasions a blood clot can collect around the catheter. This may sound alarming but in fact if it does happen it is very unlikely to cause a serious problem. Patients who develop a clot due to their PICC line are usually given medication to dissolve the clot. There is often no need to remove the line.

**Phlebitis** – This is inflammation of the vein where the line has been inserted. Symptoms of this include redness, pain at access site, streak formation, palpable venous cord, or purulent drainage.

**Thrombus formation** – Any line inserted into the vascular system increases the risk of thrombus formation, either in the vessel or in the catheter.

**Rupture of line** – Rarely, line damage may occur and most often it is from improper care. This can happen due to improper anchoring of the line, using a syringe that is less than 10mls, or by applying excessive pressure when flushing the device. If the PICC line is placed in the elbow bend, rupture can also occur from repetitive motion, this should be avoided.

**Blocked catheter** – Sometimes your catheter may become blocked which will prevent it from being used. We may be able to unblock it, but if it cannot be unblocked, it may need to be removed.

## Who will care for my PICC line?

Your PICC line will be used to deliver medications and fluids and will be looked after by the specially trained staff.

If you are at home your PICC will be cared for by the Community Nursing Team.

Anyone who accesses the line will use a very clean technique, which involves hand washing, wearing gloves and apron and using an antiseptic technique to clean the access ports before they are used.

Cleaning the exit site and applying a new dressing and access ports are done on a weekly basis, unless they are loose or dirty, when this should be done as soon as possible.

Flushing the line to prevent blocking is very important. Times when your catheter is flushed will vary, but it must be flushed whenever a medication is disconnected from the catheter.

If bags of fluid or medications are connected to the PICC they must never be allowed to stand empty. The PICC must be flushed or the bag changed immediately.

If the line is not being used it should be flushed on a weekly basis.

## When and how will my PICC be removed?

PICC lines are usually removed at the end of treatment. Rarely they are removed because there are problems with the line. They are usually removed on the ward or can be removed if you have being having your treatment by the community nursing team.

The dressing will be removed and the catheter pulled out easily, usually with no discomfort. A small dressing will then be applied. This can be removed after 24 hours.

## Some frequently asked questions:

**Can I shower or have a bath?** – With a waterproof dressing in place you can have a bath or shower but do not submerge the PICC in the water.

We ask that you do not soak the dressing, so please cover the site as best you can. If the dressing becomes loose after your bath/shower it will need to be replaced.

**What if my PICC falls out?** – If it has only partly fallen out then secure with some clean tape and contact your nurse immediately. If the PICC has completely fallen out, apply pressure to the hole in your skin for a few minutes and cover with a small sterile dressing. If it continues to bleed you will need to apply pressure for longer. Inform your nurse and make sure you keep the PICC for the nurse to inspect.

**Participating in sports/leisure** – You should refrain from participating in rough or contact sports, as the line may move or be damaged. Also swimming and submersion in water are not allowed. Vigorous activities such as weight lifting and overhand arm activities that involve the arm the PICC line is in should be avoided.

## What can the patient do to care for their own line?

If you are discharged home with a line in situ it is very important that you look after the line very well to ensure the risk of infection is minimised.

- Do not let anyone other than nursing staff touch your line.
- Keep your line out of the reach of children and animals.
- Ensure that the dressing is kept clean and dry. If the dressing becomes loose please contact your nursing/medical team.
- If you have any problems with your line you should contact your nursing/medical team immediately.

## Information for community nurses caring for patients with a PICC Line:

\_\_\_\_\_ had a Peripherally Inserted Central

Catheter (PICC) inserted on \_\_\_\_\_

The tip of the lumen is positioned in the superior vena cava and requires a strict **aseptic (non touch)** technique whenever accessing or dressing the device. The end of the PICC line exits the body at the ante cubital fossa or on the upper arm.

Valved PICCs have a pressure sensitive valve at the internal end of the PICC 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 10 - 20mls of Sodium Chloride 0.9% and a dressing change at least weekly or as required.

### **Heparinised saline is not required for flushing this device.**

## **The procedure for flushing and dressing the PICC is outlined below.**

### **Nursing care following PICC placement:**

#### **The patient should be monitored for the following potential complications:**

##### **Bleeding from insertion site:**

If this occurs, apply a sterile gauze pressure dressing to the site for 24 hours. Observe the site, then change to an IV transparent dressing.

##### **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 elbow region of the arm. Change dressing to another occlusive type and monitor.

##### **Mechanical phlebitis:**

This is inflammation of the vein caused by the body's response to the catheter and may involve the inner proximal region of the arm. This may occur more commonly during the first 7 days post insertion, but may be a delayed response.

#### **This is not an infection process.**

We advise patients to perform light arm exercises and to apply alternating warm and cold compresses intermittently (for example, 20 minutes at a time for 48 hours) post insertion. This will dilate the vein and encourage blood flow, and may need to be continued until the reaction settles.

## **Procedure for changing the dressing (Recommended every 7 days, immediately if soiled or loose) and needle free device(s).**

### **Materials required:**

Sterile dressing pack (containing gloves).

Chlorhexidine Gluconate 2% and isopropyl alcohol 70% are recommended.

Chloraprep 2% / 70% applicator is recommended.

Statlock stabilisation device if in use to secure the line. Recommended to be changed every 7 days.

Please note SecurAcath devices do not need to be changed and should be removed when the line is removed.

2 large IV transparent dressings (10cm x 12cm) needle free devices, one per lumen (should be changed weekly)

Explain procedure to patient, ensure patient fully understands and gain their consent.

Ensure privacy and dignity is maintained throughout the procedure.

Wash and dry hands thoroughly. Apply infection control principles according to local policies and guidance throughout the procedure.

Open sterile dressing pack and place all other equipment on to the sterile field.

Loosen and very carefully remove the soiled dressing ensuring the PICC remains.

Inspect site for signs of tenderness, inflammation and/or swelling.

Wash or gel hands again and put on sterile gloves.

Clean the exit site using Chlorhexidine Gluconate 2% and isopropyl alcohol 70% applicator (Chloraprep) and allow to air dry. If a SecurAcath device is in place this should be gently lifted up to allow cleaning of the exit site.

Replace the Statlock if in use and occlusive dressing.  
Dispose of clinical waste according to Local Waste Disposal Policy.

## **Procedure for flushing the catheter (Recommended at least weekly before / after each access of the line):**

### **Materials required:**

Chlorhexidine Gluconate 2% and isopropyl alcohol 70%. Sani-Cloth CHG 2% wipes are recommended. Pre-filled syringes with Sodium Chloride 0.9%.

### **Procedure for flushing the catheter:**

Explain procedure to patient, ensure patient fully understands and gain their consent.

Ensure privacy and dignity is maintained throughout the procedure.

Wash and dry hands thoroughly. Apply infection control principles according to local policies and guidance throughout the procedure.

Click to unstick pre-filled syringes.

Wash or gel hands again and put on clean non-sterile gloves.

Thoroughly clean the hub of the needle free device using a Sani-Cloth CHG 2% wipe for at least 30 seconds and allow to air dry.

Attach a 10mls syringe of Sodium Chloride 0.9% on to the needlefree device.

Flush with 1-2 mls of Sodium Chloride 0.9% and draw back gently until flashback of blood is seen.

Gently flush with 10mls of Sodium Chloride 0.9%. Thoroughly clean the hub of the needle free device using a Sani-Cloth CHG 2% wipe for at least 30 seconds and allow to air dry.

Dispose of clinical waste according to Local Waste Disposal Policy.

## For all interventions:

Complete necessary documentation.

Document rationale of any non-adherence to care plan.

Report any inability to implement care plan as a clinical incident.

Check patient well-being before leaving.

## Comments

## For any advice or to discuss specific issues do not hesitate to contact the:

Department \_\_\_\_\_

Contact no \_\_\_\_\_

## If you have any comments about this leaflet or the service you have received you can contact :

Central Venous Access Devices Team

Huddersfield Royal Infirmary Telephone (01484) 342000 - contact via switchboard

Calderdale Royal Hospital Telephone (01422) 357171 - contact via switchboard

[www.cht.nhs.uk](http://www.cht.nhs.uk)

## If you would like this information in another format or language contact the above.

Potřebujete-li tyto informace v jiném formátu nebo jazyce, obraťte se prosím na výše uvedené oddělení

Jeżeli są Państwo zainteresowani otrzymaniem tych informacji w innym formacie lub wersji językowej, prosimy skontaktować się z nami, korzystając z ww. danych kontaktowych

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اگر آپ کو یہ معلومات کسی اور فارمیٹ طرزبان میں درکار ہوں، تو  
برائے مہربانی مندرجہ بالا شعبے میں ہم سے رابطہ کریں۔

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المذكور أعلاه"