

Peripherally Inserted Central Catheter (PICC) Insertion

This information sheet explains about the procedure to insert a peripherally inserted central catheter (PICC). It describes what the procedure involves and what to expect when your child comes to the Interventional Radiology department for treatment.

Please note that this leaflet is not meant to replace discussion between you and your child's doctor. You should raise any questions you may have with the doctor who has referred your child for, or is performing, the procedure.

What is a peripherally inserted central catheter (PICC)?

A peripherally inserted central catheter (PICC) is a thin plastic tube which is inserted into a vein in the arm above the elbow. It is threaded through this vein towards the right side of the heart. The PICC is held in place with two small stitches in the skin. A PICC provides easy and reliable venous access to your child.

Why does my child need a PICC?

There are many reasons why your child might benefit from a PICC, but the most common reasons are for taking regular blood samples for testing or giving medicines such as antibiotics, chemotherapy or other medicines intravenously on a long-term basis.

There are various types of central venous access devices. However, depending on your child's age and the reason why they need one, some options may not be appropriate.

The doctors and nurses will explain the benefits and drawbacks of each available option before you and your child make a decision.

How does my child prepare for a PICC insertion?

Often PICC insertion happens while your child is already in hospital, because it is often needed if someone is already ill for other reasons. The doctor will explain the procedure to you and your child in more detail, discuss any worries you may have and ask you to sign a consent form giving permission for your child to have the procedure. The procedure is usually done while your child is asleep under a short anaesthetic but sometimes, if your child is old enough, the doctors may talk to you both about doing it with your child awake. If your child needs an anaesthetic, then they will need to stop eating and drinking a few hours before. The team on the ward will explain the details of this with you.

If your child has any medical problems, please tell the doctors. Many of the procedures we perform involve the use of X-rays. Legally, we are obliged to ask any girls over the age of 12 whether there is any chance they might be pregnant. This is to protect babies in the womb from receiving unnecessary radiation.

How is a PICC insertion performed?

Occasionally, PICCs can be inserted under local anaesthetic, that is, your child is awake but the arm is numbed with an injection. Your child will have to lie very still for about 30 minutes. In most cases, PICCs are inserted while your child is under a general anaesthetic.

It is important that your child does not eat or drink anything for a few hours before the anaesthetic. This is called 'fasting' or 'nil by mouth'. Fasting reduces the risk of stomach contents entering the lungs during and after the procedure. You will be informed the night before the procedure of the time that your child should be 'nil by mouth' – in other words, have nothing to eat or drink before the anaesthetic. It is equally important to keep giving your child food and drink until those times to ensure they remain well-hydrated and get adequate nutrition. This may involve waking your child in the night to give them a drink which we recommend.

Once your child is under general anaesthetic, the operator will use an ultrasound scan to identify one of the larger veins in the arm. Once

they have located a suitable vein, they will inject the skin over the vein with local anaesthetic and make a small incision.

The PICC is inserted into the large vein through the small incision and threaded up until the tip is in or near the right side of the heart. The operator will make a final check that the PICC is in the correct position by taking an X-ray. They will then confirm this by taking a small blood sample from the PICC and flushing the PICC with a salt water solution (saline).

The PICC is kept in the correct position with stitches. The exit site – where the PICC comes out through the skin – is covered with a see through dressing.

Who performs a PICC insertion and where?

PICC line insertion is performed by a healthcare professional specially trained in image guided procedures. This can be a nurse, doctor or radiographer. Most often it is done in the x-ray department or sometimes in an operating theatre with x-ray equipment.

What are the potential risks or complications of a PICC insertion?

The PICC is inserted while your child is under general anaesthetic. Although every anaesthetic carries a risk, this is extremely small. There is a small risk of bleeding when the incision is made but this is unlikely as it is very small.

As the PICC gives direct access to the bloodstream, infection can be a risk after the procedure. The PICC may also become blocked, dislodged or fall out, meaning that it will need to be replaced. Also there is a small risk that the vein into which the PICC has been inserted may become blocked or thrombosed.

What happens afterwards?

Your child will return to the ward after they have recovered from the general anaesthetic. Some children feel sick and vomit after a general anaesthetic. Your child may have a headache or sore throat or feel dizzy, but these side effects are usually short-lived and not severe. The area where the PICC was inserted will feel uncomfortable for a while afterwards but this soon passes. The nurses will give your child pain relief as needed. Your child can start eating and drinking as normal once they feel like it. The PICC can be used immediately if required. The see through dressing may need to be changed after 24 hours, particularly if the exit site has oozed after the operation.

If your child does not need to stay in hospital for treatment, you can return home once you are confident in caring for the PICC. Your nurse will provide you with instructions on how to look after the PICC at home.

In the first few days after insertion, you should call the hospital if:

- the area where the PICC is inserted in the area looks red, swollen and feel hotter than the surrounding skin
- the area where the PICC is inserted in the arm is oozing
- your child is in a lot of pain and pain relief does not seem to help
- your child has a temperature of 38°C or higher.

Notes