# FACTSHEE

This fact sheet is for education purposes only. Please consult with your doctor or other health professionals to make sure this information is right for your child. If you would like to provide feedback on this fact sheet, please visit: www.schn.health.nsw.gov.au/parents-and-carers/fact-sheets/feedback-form.

## Peripherally inserted central catheters (PICCs)

## What is a PICC and how is it different from a cannula?

A cannula or "drip" is a short, thin plastic tube inserted into a small vein that sits just under the skin. No metal needle remains inside. Medications and fluids are delivered through a cannula.

A PICC is a longer version of a cannula. It is inserted into a small vein in the arm, leg or scalp and then gently moved forward until the tip of the PICC is in a big vein close to the heart. PICCs are usually able to remain in these big veins for longer periods of time than cannulas, which often need to be changed. A PICC is a type of central line.



Example of a PICC.

### Why would my child need a PICC?

Certain medication	Small/difficult veins
Intravenous feeding	Long term treatment

#### How is the PICC inserted?

- Most children need to be asleep to help them keep still for the procedure. This usually means having a general anaesthetic.
- The PICC is inserted by a doctor who has been specially trained.
- The procedure is done in an operating theatre to reduce the risk of infection.
- Local anaesthetic may be injected into the surrounding area to numb the area and reduce pain. PICCs are not usually painful after they are inserted.
- The PICC is always covered by a dressing to keep it clean and safe.
- An X-ray is done after the PICC has been inserted in the operating theatre. This is to make sure the tip of the PICC is in the correct position and safe to use.
   Sometimes dye is also injected into the PICC to make it easier to see on an X-ray.

#### Problems with the insertion of PICCs

- There is a risk of bleeding or oozing around the insertion site. This usually settles down.
- The position of the PICC may not be satisfactory on the X-ray and it may need to be repositioned.
- It may be too difficult to insert the PICC. Your doctor may discuss other options to PICCs. These may include a central venous catheter (CVC) inserted into a big vein in the neck. This will be done by an anaesthetist or a surgeon.





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#### How is it removed?

Removal of a PICC is done as soon as it is no longer needed, such as on completion of treatment, unresolved complication or infection. All staff removing PICCs are trained in this task. The line is simply pulled out once all the dressings have been removed. General anaesthesia is not necessary.

## What do they mean by 'flushing' and 'hep locking'?

- 'Flushing' of the PICC occurs when a normal saline (salt water) solution is injected in the line to prevent it from blocking. This is typically done after medications have been given.
- 'Hep locking' stands for 'heparinised saline flushing'.
  Heparinised saline is a solution made out of anti-blood
  clotting agent (heparin) and normal saline solution. It is
  used when the PICC does not need any access for a
  period of time. Heparinised saline stops the blood from
  clotting within the line.



Example of a PICC.

#### **PICC** complications

The list of complications below is quite long and is not meant to scare you. Serious complications are very rare and in the majority of situations a PICC is the best choice. However, it is important that you do understand that some risks are involved before you agree to the line.

- As with any procedure there is a risk of infection, although we do our best to avoid this by making sure everything is clean and sterile in the operating theatre.
  - Signs to look for include redness, pain, heat and swelling over the site or the limb where the PICC is inserted.
  - Your child might also have a fever or feel unwell.
  - If the PICC is thought to be the reason for the infection then the line may need to be removed and your child given antibiotics.

- The part of the PICC that is outside the body may become damaged with a split or crack.
  - You may notice some fluid ooze from the line or under the dressing.
  - If this happens, the line may need to be removed.
- The PICC may be pulled out accidentally.
  - If this occurs, any fluid or medication running through the line should be stopped and the line should be clamped.
  - Pressure should be applied over the insertion site and medical staff informed immediately.
- A common complication of PICCs is blockage of the line.
  - This occurs because blood or medication gets stuck in the line.
  - PICCs will either have fluid running through them or be hep locked (see previous page) to try to prevent this from happening.
  - A blocked line can sometimes be fixed by flushing.
     Sometimes the line is too blocked and needs to be removed.
- There is a small risk of air bubbles entering the line which can cause problems.
  - We make sure that there is no air in the syringes used to inject into the line.
  - If there is a break or a leak in the line it is important to clamp it immediately to prevent air from entering.
- Very rarely there can be serious complications.
  - The PICC could damage or puncture the wall of blood vessels or of the heart.
  - A serious infection or blood clot could also develop.
  - These complications are extremely rare, but can be life threatening.
  - It is important that your doctor discuss these possible complications with you, as well as all the risks and benefits of the PICC before you provide your consent (approval) for the procedure to go ahead.

The list of complications above looks very scary. Serious complications are rare. If you are worried, please feel free to talk to your team doctor or your anaesthetist.

#### **QUESTIONS:**

(write down any question or concerns you would like to ask the doctor/nurse)