How to access a PICC for intravenous fluids or drugs

Please use strict aseptic technique.

Pre-use Assessment:

Observe for:

- Redness, pain exudate at the PICC entry site
- Swelling of the arm
- Pain in the arm
- Any history of rigors or feeling unwell post flushing

If any of the above present, contact Velindre Cancer Centre for advice: 02920 615888 bleep 194 (chemo pager)

Equipment required:

Sterile chlorhexidine 2% alcohol swab (Clinell) alcohol

2 x **10ML** or syringes + and other 10ml syringe to disconnect at the end of the infusion.

20ML 0.9% Sodium Chloride

Needle to draw up saline x 2

Pair of non-sterile gloves

Detergent wipes/70% alcohol wipes to clean the tray

Tray

Sharps bin

Procedure

- 1. Wash hands thoroughly
- 2. Clean the tray and leave to dry
- 3. Prepare your infusion line or bolus drugs prior to accessing the PICC.
- 4. Place unopened equipment onto the dry tray. Syringes, needle, clinell wipe, saline.
- 5. Wash or gel hands
- 6. Put on non- sterile gloves.
- 7. Draw up the saline ensuring not to touch key parts such as the tip of the syringe, neck of the saline amoule. Dispel air. Leave the **covered** needle onto the syringe and place into the tray.
- 8. Open the other 10ml syringe half way in order to keep the tip of the syringe clean
- 9. Hold on to the PICC, clean the very end of needle free connector thoroughly with the sterile alcohol wipe and chlorhexidine 2% (clinnell) and allow to dry. It is **imperative** that the solution is left to dry naturally. If you do not have any chlorhexidine solutions in alcohol use an alcohol swab.

Visually check that the end of the end connector is dry

- 10. Place the empty syringe into the needle free connector at the end of the PICC and pull on the plunger to withdraw blood into the syringe. If the blood does not come out, flush with a small amount of saline and try again. You will only need 1-2 mls of blood.
- 11. Attach a syringe containing the 10mls of 0.9% Sodium Chloride onto the end connector and flush with 5-10mls of saline. Connect the infusion line firmly onto the end of the PICC. You can now use the PICC as with any other central line. You **can** use a volumetric infusion pump with a PICC.
- 12. If you are giving bolus medication, infuse directly into the PICC and flush thoroughly after administration.
- 13. Once the infusion is complete, draw up a further 10mls of saline and flush the PICC using a turbulant, (pulsating push pause) action, finishing with a positive pressure. Positive pressure flushing means continuing to simultaneously flush **whilst** the syringe is removed from the end connector i.e the pressure of your thumb remains on the plunger as the syringe is removed from the end connector.

As with all Central lines, 10 mls is the minimum size of syringe to be used with PICC line. Using smaller syringe size can result in excessive pressure being exerted which could result in a damaged catheter.

Flushing technique:

A turbulant flush can be described as a rapid push pause action. The turbulence created by this form of flushing will cleanse the internal lumen of the catheter more efficiently.

A positive pressure flush is when the syringe is removed from the end of the PICC whilst still flushing – this is to close the valve at the very end of the PICC to prevent blood reflux back into the catheter which could cause a blockage.

The needle free connector needs to be changed weekly.

Don't ever force a flush into a PICC.

Disconnecting an infusion:

Always flush a PICC with a bolus syringe flush after disconnecting an infusion line. Follow figure 13 above using strict asepsis.