

## **CARE AND MAINTENANCE OF NEO-PICC PERIPHERALLY INSERTED CENTRAL CATHETER**

The Neo-Picc is designed for use when intermediate or long term IV administration is prescribed. Neo-Picc is intended for infusion of T.P.N., medications and IV fluids for neonatal and small pediatric patients. To promote optimal functioning of the Neo-Picc, the following recommendations are made.

### **FLUSHING**

Proper flushing techniques and protocols are required for catheter patency and integrity. Frequency of flushing a Heparin locked neonatal PICC would depend on the strength of the Heparin solution used. For optimal results, a solution of Sodium Heparin 10u/ml can be used at least q 8 hours. If this strength of Heparin seems too high, aspirate the dose from the catheter, prior to flushing. A Heparin solution of 1u/ml may require flushing q 4 hours.

If administering a low volume infusion, consideration may be given to the addition of Sodium Heparin 0.5 – 1.0 unit per milliliter of infusate.

The Intravenous Nurses Society recommends flushing volumes of twice the priming volume of the catheter, plus the volume of any add-on devices. The priming volume of the Neo-Picc 1.9 Fr. Catheter is 0.06 ml.

The SASH method of flushing will help eliminate problems with incompatible drugs. The use of a positive pressure flushing technique is essential to prevent a reflux of blood into the tip of the catheter, which could lead to occlusion.

**CAUTION: Small diameter syringes can generate high pressures capable of rupturing an occluded or partially occluded catheter. Never use force to inject any solution.**

### **ADD-ON DEVICES**

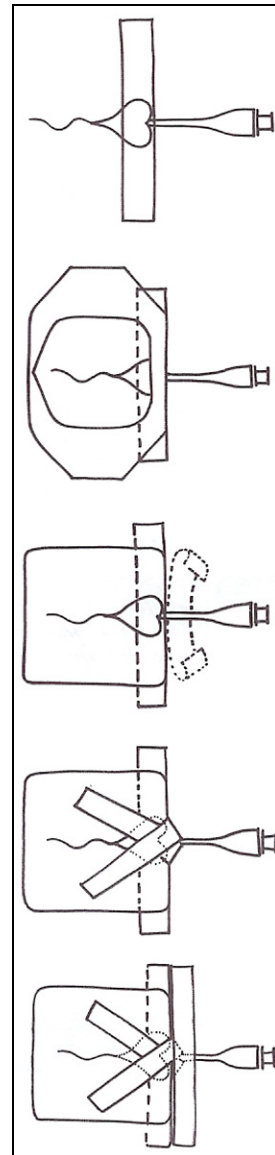
Injection caps and/or extension set should be changed per institutional policy, manufacturer's recommendations, or anytime there is leakage, or precipitate visible. All add-on devices should be a leur-lock design to prevent accidental separation.

Never use clamps, hemostats or sharp instruments on or near catheter.

## DRESSING CHANGE

Dressing should be changed as often as necessary to maintain catheter position and provide a protective environment for the catheter insertion site. Dressing should be changed if they become soiled, damp or loosened. Dressing changes should be performed with sterile technique, which includes a facemask, sterile gloves and dressing change supplies.

- Loosen the tape strips from old transparent dressing. Alcohol prep pads may aid in the removal of tape strips.
- Remove the old dressing by stabilizing the catheter hub with one hand and peeling the the dressing toward the insertion site.
- Cleanse site per institutional protocol.
- Position the exposed catheter tube with a slight offset as illustrated.
- Place a sterile tape strip over the heart shaped disc. Do not place tape over catheter tubing as this may compromise the strength and integrity of the tubing.
- Place a transparent semi-permeable dressing over the insertion site and the catheter including but not exceeding the heart shaped disc.
- Using the “chevron” technique, place a tape strip (adhesive side up) under the extension tubing next to the heart shaped disc, crossing over the disc and on top of the dressing.
- Secure the extension tubing to facilitate patient comfort.
- Label and document according to institutional policy.



## **BLOOD AND BLOOD PRODUCTS**

It is possible to give small aliquots of blood, slowly, through neonatal PICC catheters. A potential for hemolysis exists with this practice. The placement of a PICC catheter early in the course of therapy spares the peripheral vascular system repeated venipunctures, thereby allowing the use of a small gauge peripheral IV catheter for the administration of blood and blood products.

## **CATHETER REPAIR**

It is suggested that broken or damaged catheters be removed and replaced. PICC repair is a temporary measure only. Any PICC repair will eventually lead to leaking. For emergency repair, to allow therapy until the catheter can be replaced, the following peripheral IV catheter sizes will function as a replacement hub:

1.9 Fr.....24 gauge  
2.8 Fr.....22 gauge