CARE AND MAINTENANCE OF PICC AND MIDLINE CATHETER

POLICY:

RN’s will routinely care for and maintain PICC and Midline catheters.

PURPOSE:

To guide the staff in the care and maintenance of PICC and Midline catheters.

SUPPORTIVE DATA:

1. Routine maintenance (flushing): 10cc normal saline always before and after each medication.
2. Flushing shall be performed routinely and following:
   a. Administration of blood
   b. Blood sampling
   c. Administration of incompatible medications or solutions
   d. Administration of medication
   e. Intermittent therapy
   f. When converting from continuous to intermittent therapies.
   If not in use flush each port once weekly.
3. Refer to manufacturer guidelines for different kinds of PICC’s requiring various flushing protocols.
4. PICC’s and Midlines require the first dressing change 24 hours post insertion (refer to policy 4:14).
5. PICC and Midline catheters require further dressing changes every week and as needed (refer to policy 4:38).
6. Site assessment and measurement of arm circumference is done every shift and charted on the CPSI IV flow chart.
7. PICC and Midline catheter length is measured daily and charted on PICC/Midline flow sheet.
8. K Pad to upper extremity for minimum of 20 minutes 3x a day (once a shift) for a minimum of 72 hours. If any redness orders apply warm packs continuously until redness subsides.
9. If Posiflow tip in place – may remove Posiflow tip for blood draws, maintain sterility of tip/or replace as needed.

EQUIPMENT:

- Normal saline/or 10cc prefilled syringes
- Dressing change equipment
- Alcohol swabs
- (See policy 4:38)
- 10cc syringes
- Needleless system for flushing
**Procedure Steps (Flushing)**

1. Assemble equipment and wash hands  
2. Don gloves  
3. Use aseptic techniques and observe Standard Precautions throughout the procedure.  
4. Cleanse injection lockcap/or posiflow device in the following manner  
   a. Scrub with alcohol for one minute  
   b. Allow to dry for one minute  
5. Draw up appropriate flush  
   a. 10cc normal saline after medications, routine flushes, or when changing from continuous to intermittent therapies.  
   b. Use 20cc of saline after administration of blood or sampling of blood.  
6. Connect syringe into prepared port.  
7. Flush with appropriate flush using push-pause method. If posiflow devise is not used, maintain positive pressure for the last 0.5cc solution as you remove the syringe.  
8. Discard gloves, wash hands and chart.

**Key Points**

5. Refer to manufacturer guidelines for different kinds of PICC’s requiring various flushing protocols. Always use a 10cc or larger syringe and use push, pause method.  
7. If resistance is met when flushing, no further attempts to flush shall be made-contact the physician.

**Procedure Steps (Site assessment and measurements)**

1. Assess the site for redness, warmth, tenderness, swelling or drainage at insertion site.  
2. Measure 4 inches above insertion site (area should be marked on the patient's skin). Measure arm circumference at the mark. Document on the CPSI IV flow chart.  
3. Measure catheter length from insertion site to hub of the port and document length on the CPSI IV flow chart.

**Key Points**

1. Although oozing is common for the first 24 hours after insertion, excessive bleeding after that should be evaluated.  
2. Arm circumference is measured every shift.  
3. Catheter length is measured daily on day shift and as needed.

**Procedure Steps (Dressing Change)**

1. PICC’s and Midlines require the first dressing change 24 hours post insertion. (Policy 4:14)  
2. PICC and Midline catheters require further dressing changes every week and prn (Policy 4:38)

**Key Points**

1. See reference to policies 4:14 and 4:38 for procedure steps.

**REFERENCES:**

Infusion Nsg Society, Polices and Procedures for Infusion Nursing 2000, pgs 98-112  