

PROCEDURE FOR: Central Venous Line Insertion: Assisting with

- POLICY:**
1. A consent is needed prior to central venous line placement. Consents for surgically placed central catheters may be obtained by the attending neonatologist or the surgeon. Consents for placement of PICCs may be obtained by the attending neonatologist, fellow, APRN or House Physician.
 2. Only those individuals who have attended a PICC insertion class and are certified in PICC insertion will place percutaneous catheters.
 3. Central venous line insertion requires strict adherence to asepsis.
 4. The bedside at which a central venous line is to be placed will be cleaned prior to the procedure; terminal cleaning by the housekeeping department is ideal.
 5. The procedure area will be designated by the use of stable boundaries. Traffic within these boundaries is restricted to those who are essential to the procedure.
 6. Infants who are having central venous lines placed will be moved to a clean open warmer and placed on a sterile towel for the procedure. Exceptions are unstable infants or those treated with high frequency oscillatory ventilation. For infants in Giraffe® beds, consideration should be given to the amount of time the infant has been in the bed. Exceptions should be documented in the procedure note. Those infants are to be placed on sterile linens or towels prior to the procedure.
 7. The person placing the line and the assistant (either RN or APRN/PA) will need to rescrub prior to the procedure. The waterless surgical scrub is an acceptable substitute for a repeat 3 minute scrub.
 8. The person assisting with the procedure will need to wear a cap and be fully scrubbed, gowned, masked and gloved.
 9. The universal protocol (HAM 08-048) will be implemented. The universal protocol includes verification of patient identity and a "Time Out" prior to the initiation of the procedure. This is documented on the Universal Protocol Procedure Safety Checklist.
 10. No more than 2 attempts at PICC insertion will be made by the same individual at the same session.
 11. A new IV solution and infusion set that are prepared aseptically must be connected to the central line.
 12. Infants who are sedated for central line placement must be monitored according to Hospital Administrative Manual Policy for Moderate Sedation (Conscious Sedation) (HAM 08-013).

EQUIPMENT: IV infusion pump
Radiant warmer (new set up)
Privacy screens
Procedure cart
Sterile towels
Pulse oximeter

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Cardiorespiratory monitor
Transilluminator
Neonatal cutdown tray
PICC insertion tray
Central venous line insertion pack (from supply room)
Head Lamp (surgical)
Betadine solution
Xylocaine 1% plain (surgical)
Heplock solution - 10 units per ml
0.9% NaCl (normal saline) vial
Sterile gowns
Masks and caps for operator and assistant
Sterile gloves - Sizes as needed for operator and assistant
Tape - 1" paper and ½" adhesive (surgical)
Analgesic as ordered
New IV tubing, filter and solution set-up primed and free of air bubbles
Neck roll (surgical)
Universal Protocol Procedure Safety Checklist (HCH-2150)

PROCEDURE:

<u>ACTION</u>	<u>POINTS OF EMPHASIS</u>
1. Gather equipment and set up at designated area.	1. Ensure that area has been cleaned first.
2. Document baseline vital signs, pain assessment and pain score. Document sedation score at baseline as applicable.	
3. Weigh infant prior to line insertion if infant's condition permits (unless the infant is in a Giraffe® bed or other incubator with a scale).	3. This limits the potential for line displacement during movement of the infant.
4. Perform 3 minute scrub or use waterless surgical scrub according to manufacturer's instructions.	
5. Prepare ordered IV and infusion: a. Place a sterile towel on the clean surface. b. Using aseptic technique, open the packages of tubing to be used and place on the sterile towel. c. Don cap, mask, sterile gown and sterile gloves. d. Connect all tubings and purge IV tubing.	5. IV solution and infusion set that have been running through an umbilical catheter or a peripheral line should <u>never</u> be connected to a central line. d. The tubing should all be connected before the bag is spiked. If parenteral nutrition, the IV bag is not sterile; an assistant is needed.

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6. Position infant supine on a sterile towel or drape on the radiant warmer. Have a neck roll available for a line that is being surgically placed.
7. If requested, open cut down set and aseptically place extra equipment on sterile tray.
8. Universal protocol is implemented after the baby is draped and before start of the procedure and involves the entire team for the procedure. This "Time Out" is documented on the Universal Protocol Procedure Safety Checklist and the PICC Insertion and Maintenance Form (HCH-2046).
9. Administer analgesic as ordered.
10. Be available to assist the surgeon/operator as requested during the procedure.
11. Call X-Ray when central line is in place.
12. Assist with dressing of central line, if requested.
13. Document patient status during and after procedure on flowsheets and progress notes.
14. Document pain score q 4 hours x 24 hours after surgical line placement. Discontinue pain assessment when pain score < 4 for 24 hours without analgesics.
6. The surgeon or other operator will position the infant for insertion of the line after choosing the site for line placement. Immobilization of the limbs may be needed. For surgically-placed lines, the infant's position will be stabilized with 1" paper tape.
8. The PICC Insertion and Maintenance Form is not used when a Broviac or Cook catheter is placed.
9. An additional RN may be needed to document assessments for moderate sedation (conscious sedation) monitoring. This person will need to be in full surgical garb in case access to the infant is necessary.
12. When possible, the central line will be looped under the transparent dressing. A chevron of adhesive tap should be used to secure the line to avoid dislodging.
 - a. Avoid placing the tape over the transparent dressing.
14. Refer to HAM policy for Moderate (Conscious) Sedation.

APPROVAL: Nursing Standards Committee

EFFECTIVE DATE: 1/85

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REVISION DATES: 1/86, 5/88, 9/88, 4/91, 3/92, 8/93, 3/95, 12/97, 7/99, 10/00, 10/01,
12/02, 12/04, 7/07, 11/08, 7/09