SECTION II

PROCEDURE II - C

CENTRAL VENOUS ACCESS DEVICE
FLUSHING & HEPARINIZING THE CATHETER

PURPOSE: To maintain patency and provide aseptic care of the central venous access device.

General Rule: Catheters are flushed every 3 days with the tubing change when the client is receiving therapy via a pump. The catheter is flushed before and after access. If a central venous access device is not in use, the catheter is flushed and heparinized weekly. Double lumen catheters require that each lumen is flushed with saline followed by Hepalean (except for Groshong PICC – see below)

The Interlink injection cap is used to access the device and therefore needs to be changed after 200 punctures with a blunt plastic cannula every 2 weeks when not in regular use and every week when the device is being used regularly for medication or hydration.

Exception: The Groshong PICC is flushed using normal saline only and does not require clamping. Withdrawing for blood flashback is now required before any medication administration

Exception: The L-Cath (or midline catheter) is an open ended catheter and requires clamping and the use of a daily N/S flush followed by 3 to 5 mls of Hepalean. The catheter terminates in the midpoint between the elbow and the axilla making it a midline catheter. It is important to distinguish a midline catheter from a central catheter because of the medications that can not be used in a midline catheter. The care and dressing changes are as per CHEO protocol – strict surgical asepsis and sterile gloves whenever the line is opened. These lines are not routinely aspirated or used for blood procurement due to the small diameter of the lumen. The amount of N/S required for flushing may be reduced (5 ml) as may the amount of Hepalean (1.5 ml). The child's arm circumference is measured as per protocol (daily).

SUPPLIES:
2 - 10 ml syringe
2 - Blunt plastic cannula
Normal Saline (20 ml) Alcohol swabs
Vial access cannula to access N/S
Hepalean 1:100u/ml 1 pkg. sterile 4x4's
Universal vial adapter to access Heparin vial with blunt needle
Cap – Interlink Injection Site

PROCEDURE:

1. Assemble equipment. Explain procedure to the client and position the client comfortably.

2. Wash hands thoroughly.

3. Remove caps from 2 vials of N/S and 1 Hepalean vial. Wipe vial top with alcohol prep if not sterile.

4. Attach vial access cannula (single use only) to syringe and draw up 20 ml of N/S.

5. Attach universal vial adapter for blunt plastic cannula access to rubber stopper of Heparin vial. Draw up 3 – 5 ml of heparin. Universal vial adapter remains in vial for future access.

6. Ensure catheter is clamped. Cleanse the cap using an alcohol swab with a friction rub, briskly scrub the cap using a circular motion beginning at the tip and continuing in a circular motion around the cap and proceeding to 5 cm (2") of the distal end of the catheter x 1 minute. Repeat the above.

7. Place the cleansed portion of the catheter on a sterile 4x4 and allow to air dry for 30 seconds.

8. Insert the N/S filled syringe with blunt plastic cannula into the injection cap, unclamp and flush using a turbulent, stop start motion ending with positive pressure by clamping or withdrawing the cannula as instilling the last 0.5 ml of flush solution.

9. Insert the Hepalean filled syringe and flush as above.

   If unable to flush the catheter and it is not twisted or kinked, call the vascular access nurse at the hospital where the line was inserted and arrange for the client to be seen. The line may require the instillation of Cathflow or HCL to unblock the catheter.

10. Document: date and time, patency of access device (blood return and ease of flush), flush solution and amount and condition of insertion site.

For Cap Change

1. Prime the multi-use injection cap with a few drops of Heparin solution to eliminate air space.

2. Ensuring that the catheter is clamped, pick up the cleansed catheter near cap. Using aseptic technique, unscrew cap.

3. Recap the catheter with new cap. **DO NOT** put the catheter down without protecting the exposed end with a sterile syringe, IV tubing or cap. Document cap change.