

Heparin Locking of Central Venous Catheters

Procedure

1. Use alcohol wipe to clean table.
2. Wash hands for 2 minutes. Dry thoroughly.
3. Open supplies and place on table.
4. Wash hands for 30 seconds and apply sterile gloves.
5. Use the 3-mL syringes and needles to draw up the appropriate volume of heparin as indicated on the lumens of each catheter (volume varies).
6. Ensure lines are clamped.
7. Remove caps from lumens. Clean the end of the lumen using the antiseptic wipe or swab. Allow to dry.
8. Connect the heparin-containing syringe to the arterial lumen and instill heparin solution. Replace cap. Repeat for venous lumen.
9. Allow heparin solution to dwell in the lumens until the next dialysis run.
10. Use the antiseptic wipe or swab to clean the ends of the lumens.
11. Aspirate heparin from the lumens using a 3-mL syringe.
12. Use the 10-mL syringes and needle to draw up sodium chloride using separate syringes for each lumen. The total volume in each syringe should be twice that of the lumen. When using Tego connectors, add 0.1 mL to volume.
13. Flush lumens with sodium chloride solution.
14. Perform dialysis, per protocol.
15. Adjust postdialysis heparin bolus to account for heparin used in lock.

Supplies

- 1 Dialysis dressing pack
- 1 Personal protective equipment (eg, apron, gloves)
- 2 10-mL syringe with Leur lock
- 2 3-mL syringe with Leur lock
- 2 Sterile Leur lock caps or Tego connectors
- 2 18-gauge needle
- 2 10-mL ampules of 0.9% sodium chloride
- 2 Antiseptic wipe or swab (eg, isopropyl alcohol 70%/chlorhexidine 2%)
- 4 6mL heparin sodium, 5000 units per 1 mL (number of ampules determined by volume of catheter, as indicated by lumen)
- 1 Alcohol disinfecting wipe

Protocol adapted with permission from Metro South and Ipswich Nephrology and Transplant Services (MINTS), Queensland, Australia.