

## I-150 Peripheral Cannula Placement

### Purpose

Place a cannula that provides access to the venous system.

### Applies To

Registered Nurses

Licensed Practical/Vocational Nurses

Other (*Identify*): \_\_\_\_\_

### Equipment/Supplies

- IV cannula, smallest gauge and shortest length which will allow safe infusion of prescribed therapy.
- IV injection cap or tubing with IV solution.
- 2 Betadine swabs or swab sticks.
- 3 alcohol swabs.
- Tape.
- Tourniquet.
- Transparent dressing.
- Tubex of sterile normal saline.
- Tubex of heparin.
- Tubex holder.
- T-port extension set.
- Gloves.
- Sharps disposal container.
- IV start kit: (gloves, mask, gauze pads, alcohol pads, transparent semi permeable membrane dressing, injection cap, Povidone-iodine Swabstix, alcohol wipes, peripheral catheter, flush solution, syringes.)

### Procedure

1. Review physician's order.
2. Explain the procedure to the client/caregiver.
3. Assemble the equipment.
4. Wash hands. Follow standard procedures. Refer to Hand Washing procedure.
5. Don clean gloves. Eye protection or goggles are to be worn at the discretion of the Registered Nurse.

6. Position the client for comfort to access puncture site.
7. Using aseptic technique, clear IV line of air by priming with IV solution. If using a male adapter plug or extension tubing, fill with heparin.
8. Prepare tubex of sterile saline or heparin.
9. Select appropriate venipuncture site. *Choose a site below the client's elbow to increase comfort. Avoid cannulation over joints or previous IV sites as this predisposes to infiltration.*
10. Apply tourniquet proximal to venipuncture site. Check for radial pulse. *If radial pulse is absent, the tourniquet is too tight. Check refill capacity of the vein by running a finger along the vein. If refill is sluggish, the vein will be prone to collapse after catheter insertion. Another vein should be used.*
11. Cleanse selected site with approved solution (Povidone-iodine or 70% alcohol), starting at intended puncture site and cleansing outward in circular motion to a diameter of about 3-4 cm. Repeat with new swab and allow to dry.
12. Stabilize the vein by holding skin taught with thumb below site.
13. Puncture the vein with bevel of needle up and having needle at a 30 – 45° angle above the extremity. Use either the direct or indirect approach. Direct: Enter skin directly above the vein. Indirect: Enter skin beside the vein and direct catheter to enter the side of the vein. Observe for blood flow.
14. Once access is achieved, lower the needle until it is almost flush with the skin. Release tourniquet and advance catheter.
15. Attach the intermittent injection cap securely to the catheter hub.
16. Test cannula placement by either slowly injecting some of the sterile saline or slowly starting IV infusion.
17. Secure cannula with tape to prevent accidental dislodgment. *Avoid taping directly over the catheter as this may impede blood flow.*
18. Cleanse injection cap with alcohol swab.
19. Apply transparent dressing over cannula site with distal edge covering the cannula adapter to the injection cap. Label the insertion site with: catheter gauge, date/time of insertion, and the initials of the person performing the procedure.
20. If solution is not to be administered following cannula insertion, inject 1 ml of 100u/ml heparin into the injection cap.
21. Dispose of used needles, syringes, and gloves as outlined in the Agency Waste Disposal Policy.
22. Wash hands. Refer to Hand Washing procedure.

### Documentation Guidelines

Document in the clinical record:

1. The procedure.
2. The size and type of cannula inserted.
3. Location of the site.
4. The date and time of cannula insertion.
5. The dose of heparin administered.
6. The client's tolerance of the procedure.
7. Name of person inserting catheter.
8. Number of attempts required.

**Special Considerations**

If the cannula is to be used on an intermittent basis, it should be flushed with heparin or saline after each dose of medication or every 12 hours whichever is less.

**Client/Caregiver Instructions**

Clients receiving home infusion therapy need to receive information that will help them protect the catheter and troubleshoot minor complications. This could include, but is not limited to:

Movement restrictions.

How to keep the site dry and what to do if it becomes wet.

Instructions to call the Agency if redness, swelling, or pain occurs at the site.

Frequency and technique for flushing the catheter.

Specific administration instructions if client is to self-administer therapy.

**Related Procedures**

None.

**Policy History**

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