
Peripheral IV Therapy

PURPOSE:

To introduce fluids, blood/blood components, and medications directly into the vascular system by peripheral access.

POLICY:

1. The physician's order shall include:
 - A. Initiation or termination of IV therapy.
 - B. Type of IV fluids to be administered, additives, and rate of administration.
2. An IV may be inserted by a registered nurse, or *LPN who has completed an approved IV Therapy course.

***NOTE: LPN's shall not administer blood/blood products, TPN, chemotherapeutic or investigational drugs. See Nursing Policy, P80, Procedures Not Permitted, for additional information.**

3. An infusion containing additives or an infusion ordered at a specific rate shall be administered via an infusion pump.
4. Hands shall be washed with an antiseptic containing product (chlorhexidine) before palpating, inserting, changing, or dressing any intravascular device. Gloves shall also be worn when starting IV's.
5. Peripheral IV sites, tubing and dressings shall be changed at least every 96 hours. The insertion site shall be cleansed with alcohol or other antiseptic and a sterile dressing applied, either gauze and tape or transparent dressing. Tegaderm is the only transparent dressing recommended for use with invasive lines. When dressings become loose, damp, or soiled, the dressing shall be replaced. Tubings and dressings shall be dated and timed when changed and documented in the medical record. (For information regarding IV Locks, refer to PCS Policy H-10, Intermittent IV Locks).
6. The insertion site shall be evaluated at least every eight (8) hours with appropriate documentation in the medical record regarding dressing, site condition, type of fluid administered, and rate of administration. The catheter site shall be palpated for tenderness through the intact dressing. The site should be visually inspected if tenderness develops, if there is fever with no obvious source, and/or symptoms of local or bloodstream infection occur.

If visual inspection of the site is not possible, or the patient has large bulky dressings that prevent palpation, the dressing shall be removed and the site visually inspected. Peripheral venous catheters shall be removed when signs and symptoms of infection are present, i.e., warmth, tenderness, erythema at the insertion site. Any signs of infection shall be reported to the MD immediately and documented in the medical record.

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7. Infusion bags shall be changed at least every 24 hours.
8. With the exception of known products (i.e., Blood, TPN, or medications for which the manufacturer recommends filtration) filters are **NOT** necessary for IV administration.
9. When an IV is inserted under emergency conditions, the site shall be changed within 24 hours.
10. Based on a documented patient assessment, an armboard may be utilized to protect the IV site.
11. If an IV is ordered and the nursing staff is unable to start/restart the infusion, the physician shall be notified.

EQUIPMENT:

- IV Catheter (appropriate size) Tape
- Clean Gloves IV Fluid
- Tubing Label
- IV Start Kit (tourniquet, chloraprep, gauze and Tegaderm dressing)

RESPONSIBLE PARTY	ACTION/RATIONALE
MD	<ol style="list-style-type: none"> 1. Writes order for: <ol style="list-style-type: none"> a. Initiation or termination of therapy b. IV fluid; additives c. Rate of administration
RN, RN Applicant, *LPN, Student Nurse	<ol style="list-style-type: none"> 2. Explains procedure to patient and instructs him/her to report to the nurse/MD any redness, swelling, drainage, etc., which could indicate infection and/or other complications. <p style="margin-left: 40px;">Rationale: To provide education and involve patient in their care.</p> 3. Washes hands with chlorhexidine. 4. Assembles equipment. 5. Dons clean gloves, selects appropriate site, applies tourniquet, and preps site with chloraprep. <p style="margin-left: 40px;">NOTE: Do not palpate site after skin has been cleansed with antiseptic.</p>

RESPONSIBLE
PARTY

RN, RN Applicant,
*LPN, Student Nurse

ACTION/RATIONALE

6. Performs venipuncture using aseptic technique. The following guidelines apply to inserting the PROTECTIV* IV Catheter (Johnson and Johnson).
 - a. Verify that the catheter is fully “seated” on the introducer needle before venipuncture.
 - b. Catheter is “ready for use”—it does not require rotating the hub 360° prior to threading.
 - c. Holds device by the contoured grip pads.
 - d. Keeps the needle bevel and push-off tab in the upright position.
 - e. Inserts the introducer needle at an appropriate angle
Rationale: A lower angle of entry, especially with superficial veins, may prevent puncture through the posterior vein.
 - f. Identifies the flash chamber.
Rationale: The sharpness of the needle may diminish the "pop" sensation. Rely on the flashback of blood into the flash chamber to confirm vein entry. A flashback of blood may occur before the catheter tip is fully in the vein.
 - g. Uses the push-off tab to thread the cannula into the vein, while keeping the needle guard stationary. OR If using a floating technique, attach a primed administration set to the catheter hub and initiate fluid flow.**Raise the catheter hub to the angle of insertion and gently advance.** Remove tourniquet immediately after successful advancement of the cannula.
Rationale: If necessary slightly advance the catheter and needle together to assure full catheter entry into the vein lumen.
 - h. Withdraws the needle back completely into the needle guard.
 - i. Engages the safety mechanism, listening for the “CLICK” to confirm needle is locked and safe.
 - j. Applies digital pressure to the vessel *beyond the tip of the cannula.*

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RESPONSIBLE
PARTY

ACTION/RATIONALE

- k. Removes needle guard *after* ¼ turn to the right or left while securing catheter hub.
Rationale: Loosens the luer slip seal between the nose of the needle guard and the hub.
 - l. Holds needle guard by grip pads when twisting and disconnecting.
 - m. Properly disposes of needle guard in sharps container.
 - n. **CAUTION: DO NOT REINSERT the introducer needle into the cannula at any time.**
Rationale: The needle could damage or sever the cannula, resulting in cannula embolus, or result in fluid leakage at the insertion site.
 - o. If necessary to redirect catheter, hold the hub and needle as one unit.
Rationale: The cannula and hub must be held as one unit to prevent needle retraction.
- RN, *LPN, RN
Applicant, Student
Nurse
- 7. Connects primed IV tubing.
 - 8. Adjusts rate utilizing an infusion pump for solutions containing additives and/or those ordered at a specified rate.
 - 9. Applies sterile dressing, either gauze and tape, or transparent dressing (Tegaderm).
 - 10. Disposes of soiled equipment and removes gloves.
 - 11. Washes hands.
 - 12. Labels IV tubing and dressing with date, time, and initials.
- RN, *LPN, RN
Applicant
- 13. Documents in medical record:
 - a. date/time IV initiated
 - b. size of catheter
 - c. location
 - d. type of IV fluids/additives
 - e. rate of administration.

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RESPONSIBLE

PARTY

RN, *LPN, RN
Applicant

ACTION/RATIONALE

14. Evaluates IV site at least every 8 hours for signs, symptoms of infection, redness and/or infiltration and documents appropriately in the medical record.
15. Changes IV site at least every 96 hours, tubing and dressing at least every 96 hours.
16. Notifies MD immediately if infection is suspected.
17. Discontinues IV with dry sterile dressing and applies pressure until bleeding stops.

BIBLIOGRAPHY

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Signature

Date

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Signature

Date

JOHNSON & JOHNSON MEDICAL™
PROFICIENCY CHECKLIST FOR THE
PROTECTIV* I.V. CATHETER SAFETY SYSTEM
MANDATORY INSERVICE

Performance Criteria	Date Met	Initials
1. Discusses safety issues related to needlestick injuries and views Insertion Video.		
2. Performs venipuncture using the PROTECTIV* I.V. Catheter Safety System a. Washes hands with chloroexidine b. Dons clean gloves c. Selects venipuncture site d. Applies tourniquet e. Preps site with chloraprep f. Verifies that the catheter is fully seated on the introducer needle before venipuncture g. Holds device by the contoured grip pads. h. Keeps the needle bevel and push-off tab in the upright position. i. Inserts the introducer needle at an appropriate angle. j. Identifies the flash chamber. k. Uses the push-off tab to thread the cannula into the vein, while keeping the needle guard stationary. Removes tourniquet immediately after successful advancement of the cannula. l. Withdraws the needle back completely into the needle guard. m. Engages the safety mechanism, listening for the “CLICK” to confirm needle is locked and safe.		
3. Demonstrates proper method to disconnect needle guard. a. Applies digital pressure to the vessel <i>beyond the tip of the cannula.</i> b. Removes needle guard <i>after</i> 1/4 turn to the right or left while securing catheter hub. c. Holds needle guard by grip pads when twisting and disconnecting. d. Properly disposes needle guard in sharps container.		
4. Demonstrates variations of insertion technique. a. Inserts the PROTECTIV* I.V. Catheter using a “one-handed” technique. b. Inserts the PROTECTIV* I.V. Catheter using a “two-handed” technique. c. Demonstrates proper technique for “redirecting” when venipuncture is unsuccessful. (Hold hub and needle as one unit). d. Demonstrates proper technique of engaging the safety mechanism when “floating” the cannula, if obstruction to advancement of cannula is met.		

DO NOT REINSERT THE INTRODUCER NEEDLE INTO THE CANNULA AT ANY TIME.
The needle could cut the cannula, resulting in a cannula embolus.

 Participant’s Signature and Initials

 Unit

 Instructor’s Signature and Initials

Reference: Farley, Kathy L. (1999). Education and Implementation Training Guide. Johnson & Johnson Medical.