

Advanced Infusion Therapy

HOW TO OPERATE THE ELECTRONIC INFUSION DEVICE IN THE TREATMENT OF CHF

1

ELECTRONIC INFUSION DEVICE(EID) FOR CONTINUOUS INFUSION OF CHF MEDICATIONS

Upon completion of this course, the participant should be able to:

1. Operate the electronic infusion device (EID).
2. Change from Hospital IV Medication EID to the Pharmacy IV Medication EID.
3. Change Medication Bag and Administration Set.
4. Change the needleless connector from the catheter of a patient receiving IV diuretic or inotropic medication.

2

EQUIPMENT NEEDED FOR THE PROCEDURE

- Prescribed inotropic medication bag
- IV Administration set, per specified EID
- Electronic Infusion Device (EID) - (Back-up EID for inotropic therapy shall be available in the facility)
- Non-sterile gloves
- Alcohol wipes
- Needleless connector (if performing needleless connector change)
- Sterile end cap

3

SPECIAL CONSIDERATIONS

- Change needleless connector on admission, every 7 days and PRN. It is preferred to change the needleless connector simultaneously with the inotropic medication bag and administration set change.
- Routine catheter flushing is NOT recommended when changing the continuous IV inotropic medication bag or the needleless connector to prevent a rapid bolus of the IV inotropic medication
- IF catheter flushing is required the Licensed Nurse must first withdraw 5ml of blood to remove the residual inotropic medication from the CVAD lumen, then flush the lumen with the prescribed flush solution per policy.
- To further minimize the risk of air embolism, it is recommended to perform the needleless connector change during resident exhale or while the resident performs the Valsalva maneuver or holds breath.

4

PROCEDURE TO CHANGE INOTROPIC BAG AND ADMINISTRATION SET

Procedure to change inotropic medication bag and administration set:

1. Verify with 2nd Licensed Nurse: Prescriber order conforms with the label on the medication. Label medication bag with date, time, and nurse's initials.
2. Inspect medication bag for elements to include but not limited to expiration date, sedimentation, particulate matter, change in color, and leaking. If issue noted, notify Infusion Pharmacy. Ensure medication is at room temperature.
3. Assemble and prepare supplies on a clean surface.
4. Perform hand hygiene and don non-sterile gloves.
5. Remove administration set from packaging, assess integrity and ensure protective covers on both ends.
6. Close roller clamp on administration set.

5

PROCEDURE TO CHANGE INOTROPIC BAG AND ADMINISTRATION SET

7. Aseptically spike medication bag with administration set then continue as noted below:
 - a. If changing needless connector per policy (i.e. new admission, every 7 days and PRN):**
 - i. Aseptically attach needless connector to end of NEW administration set, then prime administration set, per manufacturer's instructions, along with needless connector per policy.
 - ii. Clamp administration set and label per policy. Place on clean surface.
 - b. If utilizing existing needless connector on CVAD lumen designated for inotropic med:**
 - i. Aseptically spike medication bag and prime administration set per manufacturer's instructions.
 - ii. Clamp administration set and label per policy. Place on a clean surface.

6

PROCEDURE TO CHANGE INOTROPIC BAG AND ADMINISTRATION SET

8. Discard used supplies, remove gloves and perform hand hygiene.
9. Proceed to patient's room.
10. Identify patient per facility policy.
11. Explain procedure to patient/personal representative.
12. Assemble and prepare supplies on a clean surface.
13. Perform hand hygiene and don non-sterile gloves.
14. STOP EID, clamp catheter lumen and aseptically disconnect administration set from catheter lumen.
15. ATTACH NEW medication bag and administration set to EID.

7

PROCEDURE TO CHANGE INOTROPIC BAG AND ADMINISTRATION SET

16. Program EID/Verify EID with 2nd licensed nurse to ensure EID settings to conform with prescriber order.
 - a. If changing the needleless connector**, while holding hub of catheter lumen:
 - i. Vigorously cleanse junction between needleless connector and the catheter hub with an alcohol wipe and allow to AIR DRY.
 - ii. While holding the catheter lumen, have patient perform the Valsalva maneuver. While utilizing aseptic non touch technique, quickly remove current needleless connector/administration set and then immediately attach new primed needleless connector/administration set to the dedicated inotropic CVAD lumen and ensure securement.
 - b. If utilizing existing needleless connector:**
 - a. Vigorously scrub needleless connector with an alcohol wipe.
 - b. Remove sterile end cap from inotropic administration set and aseptically attach the inotropic administration set to the needleless connector.

8

PROCEDURE TO CHANGE INOTROPIC BAG AND ADMINISTRATION SET

17. Open clamps on catheter lumen/administration set and START EID.
18. Verify drops are falling in the drip chamber and the medication is infusing per Prescriber order before leaving the patient.
19. Dispose of used supplies per facility policy.
20. Remove gloves and perform hand hygiene.
21. Document per facility policy.
22. Report to Prescriber and Supervisor any complications noted during procedure, as applicable.

9

PROCEDURE TO CHANGE INOTROPIC BAG

Procedure to change Medication Bag and Administration Set:

1. Verify with 2nd Licensed Nurse: Prescriber order conforms with the label on the medication. Label medication bag with date, time, and nurse's initials.
2. Inspect medication bag for elements to include but not limited to expiration date, sedimentation, particulate matter, change in color, and leaking. If issue noted, notify Infusion Pharmacy. Ensure medication is at room temperature.
3. Identify patient per facility policy.
4. Explain procedure to patient/personal representative.
5. Assemble and prepare supplies on a clean surface.
6. Perform hand hygiene and don non-sterile gloves.
7. STOP EID, clamp catheter lumen and aseptically disconnect administration set from catheter lumen.

10

PROCEDURE TO CHANGE INOTROPIC BAG

8. Aseptically remove spike from current infusion bag and aseptically spike new medication bag. Hang new medication bag on IV pole.
9. If applicable to prime IV administration set, aseptically disconnect IV administration set from needleless connector, remove from EID, and prime per manufacturer's instruction to ensure IV administration set is free of air and then:
 - a. Reload IV administration set into EID per manufacturer's instruction.
 - b. Vigorously scrub needleless connector with alcohol wipe. Allow to air dry.
 - c. Aseptically attach IV administration set to needleless connector.
10. RESET EID settings as applicable to include but not limited to:
 - a. CLEAR total given (mL)
 - b. ENTER VTBI of new inotropic solution bag (mL)

11

PROCEDURE TO CHANGE INOTROPIC BAG

11. Verify with 2nd licensed nurse EID settings conform with Prescriber order.
12. Open clamps on catheter lumen/administration set and START the EID
13. Verify drops are falling in the drip chamber and the medication is infusing per Prescriber order before leaving patient.
14. Dispose of used supplies per Facility policy.
15. Remove gloves and perform hand hygiene.
16. Document per Facility policy.
17. Report to Prescriber and Supervisor any complications noted during procedure, as applicable.

12