

# Southern Illinois Regional EMS System

## II-6 ADMINISTRATION OF IV MEDICATION

1. Policy:
  - 1.1. To establish guidelines for administering fluids or medications by intravenous bolus.
2. Equipment:
  - 2.1. Gloves and full face protection.
  - 2.2. Antiseptic cleansing solution.
  - 2.3. Syringe (large enough to contain the required amount of fluid or medication).
  - 2.4. Needle:
    - 2.4.1. Preferably 18 gauge.
  - 2.5. Medication or fluid to be administered.
3. Procedure:
  - 3.1. Put on gloves and full face protection.
  - 3.2. Assemble all necessary supplies and equipment:
    - 3.2.1. Check for:
      - 3.2.1.1. Correct medication, or fluid.
      - 3.2.1.2. Expiration date.
      - 3.2.1.3. Seal leakage.
      - 3.2.1.4. Contamination.
      - 3.2.1.5. Abnormal color.
      - 3.2.1.6. Cloudiness.
  - 3.3. Assess IV for patency.
  - 3.4. Confirm the order/dosage by writing it down.
  - 3.5. Ascertain from the patient if he/she has an allergy to the medication or fluid you are to administer.
  - 3.6. Explain to the patient:
    - 3.6.1. The medication administration procedure.
    - 3.6.2. Advise patient of effects and possible side effects that may result.
  - 3.7. Obtain the fluid or medication.
  - 3.8. If you are using an ampule:
    - 3.8.1. Shake it down:
      - 3.8.1.1. This will force the solution to the lower portion to prevent spillage.
  - 3.9. Using one 4X4 gauze pad or alcohol prep:
    - 3.9.1. Break the ampule.
    - 3.9.2. Affix the 18 gauge needle to the syringe:
    - 3.9.3. Withdraw the solution from the ampule.
  - 3.10. If you are withdrawing the medication from a multi dose vial:
    - 3.10.1. Remove the top of the vial.
    - 3.10.2. Cleanse the rubber top of the medication vial with the antiseptic cleansing solution.
    - 3.10.3. Draw up air into your syringe with needle attached to equal the amount of fluid that is to be withdrawn.
    - 3.10.4. Insert the needle into the vial:
      - 3.10.4.1. Invert the vial.
      - 3.10.4.2. Instill the drawn up air into the vial.
      - 3.10.4.3. Keep the needle below the fluid level.
      - 3.10.4.4. Withdraw the required amount of medication or fluid.
      - 3.10.4.5. Withdraw the syringe and needle and invert the syringe and expel any air.

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## II-6 ADMINISTRATION OF IV MEDICATION (continued)

- 3.10.5. Locate a medication port on the IV administration set and cleanse it with the aseptic cleansing solution.
- 3.10.6. Insert needle with syringe into the medication port.
- 3.10.7. Pinch IV tubing above the administration site.
- 3.10.8. Administer the solution in a slow. Deliberate fashion:
  - 3.10.8.1. Be aware of slower administration rates with some medications.
- 3.10.9. Remove the syringe and needle from the medication port:
  - 3.10.9.1. DO NOT RECAP THE NEEDLE:
    - 3.10.9.1.1. Dispose of the needles and syringe in a puncture resistant bio hazard container.
- 3.10.10 Release the pinched tubing.
  
- 3.11. In some cases, where more than one medication is to be given through the same IV line:
  - 3.11.1. It may be necessary to flush the line between administrations.
- 3.12. Confirm the correct dosage administered.
- 3.13. Monitor the patient for:
  - 3.13.1. The desired therapeutic effects
  - 3.13.2. Possible side effects.
  - 3.13.3. Potential complications.
  
4. Rupture of the vein:
  - 4.1. Rupture of the may occur if the medication is administered too rapidly.
  - 4.2. Rupture may be avoided or minimized by administering the medication at prescribed rate.
  - 4.3. Signs of injury will include hematoma at site and other possible complications dependant upon site of IV.
  - 4.4. A hematoma that develops at the IV site may be managed by removing the IV and managing any bleeding with direct pressure and 4X4's
  - 4.5. Contact medical control for further orders.
  
5. Monitor the patient for Toxicity:
  - 5.1. All medications should be administered at the prescribed concentration, dose and rate.
  - 5.2. Medications that are administered faster than indicated or in larger concentrations-doses than indicated may produce symptoms of toxicity in the affected patient.
  
6. Documentation:
  - 6.1. Who attempted/performed task.
  - 6.2. Number of attempts vs successful.
  - 6.3. PPE and equipment used.
  - 6.4. Name, concentration and dosage of medication.
  - 6.5. Site of administration.
  - 6.6. Any complications or undesired side effects.
  - 6.7. Were desired therapeutic effects attained?
  - 6.8. Time medication administered.