Infusion Therapy – Adding Medication to IV Solutions Using Volume Control Set (Burette, Volutrol, Buritrol) SECTION: 25.01

Strength of Evidence Level: 3 __RN__LPN/LVN__HHA

PURPOSE:
To administer medication through primary IV line that requires dilution.

CONSIDERATIONS:
1. Review physician's order for the type of medication and amount of diluent.
2. Review the actions, usual dose, indications for use, side effects incompatibilities of the solution and medications to be used.
3. Policies for daily solution and tubing changes apply.
4. Antibiotics to be infused over 30 - 60 minutes or as ordered.
5. Routine lab work to be drawn as per physician's orders.
6. Use at least two (2) patient identifiers prior to administering medications.
7. Per Joint Commission recommendations, all tubes and catheters should be labeled to prevent the possibility of tubing misconnections. Staff should emphasize to all patients the importance of contacting a clinical staff member for assistance when there is an identified need to disconnect or reconnect devices.

EQUIPMENT:
Gloves
Medication
Volume control administration set
Alcohol applicator (wipe/swab/disk/ampule)
Syringe and needle or needle less adaptor
Puncture-proof container
Impervious trash bag

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain procedure and purpose to patient/caregiver.
3. Assemble equipment on a clean surface close to the patient.
4. Place patient in comfortable position, making sure that site is accessible.
5. Ensure adequate lighting.
6. Open administration set package, close roller clamp above burrette chamber and below.
7. Aseptically spike solution container.
8. Open upper clamp and fill burrette chamber with appropriate amount of solution per physician order. Close upper clamp.
10. For continuous infusion:
    a. Aseptically connect IV to cannula extension/injection port.
    b. Open upper clamp, fill burrette chamber with 50 ml of IV solution.
    c. Close slide clamp on burrette chamber airway.
    d. Open lower clamp and regulate flow rate.
11. For intermittent infusion:
    a. Open upper clamp, fill burrette chamber with prescribed amount of diluent and close upper clamp. (Air clamp should be open.)
    b. Wipe port of burrette chamber with alcohol wipe. Allow to air dry.
    c. Add medication to be infused in proper amount of solution into burrette chamber.
    d. Open lower clamp, regulate flow rate. [Note: Membrane filter valve on bottom of burrette chamber will shut off when burrette chamber is empty to prevent air from entering tubing. Important to monitor flow closely to refill burrette chamber to maintain continuous flow and vein patency.]
12. Refill burrette chamber, see Step 10 for continuous infusion and Step 11 for intermittent infusion.
13. Discard soiled supplies in appropriate containers.

AFTER CARE:
1. Document in patient's record:
   a. Type and amount of solution infused.
   b. Medication dosage, time and rate.
   c. Type and appearance of venous access site.
   d. Patient's response to procedure, side effects and management.
   e. Instructions given to patient/caregiver.
   f. Communication with physician.