Adding Meds to IV Fluid Container

Purpose: to provide and maintain a constant level of a medication in the blood; to administer well-diluted medications at a continuous and slow rate.

1. Assess IV site for s/s infiltration, phlebitis, infection, and leaking.
2. Check physician's order, client allergies, baseline VS, compatibility of IV fluid with medication prescribed.
3. Follow 3 checks of medication administration.
4. Clean injection port with alcohol.
5. Carefully inject medication into bag.
6. Mix by rotating bag gently.
7. Print name and dose of medication, date, time and initials on label and attach to bag. Do not write directly on the bag.
8. Clamp tubing, spike bag, fill drip chamber ½ full, and prime tubing.

You will perform this skill using a secondary or “piggyback” bag.

Hanging Intermittent (“secondary”, “piggyback”) Infusions

Purpose: to administer a medication mixed in a small amount of IV solution. Usually given at regular intervals over 30 to 60 minutes. Two types of set-up: Tandem – attached to the primary tubing at the lower port and allows either intermittent or simultaneous infusion. Piggyback – attached to primary tubing at the highest port and allows only intermittent infusion. Primary bag must be hung lower than secondary bag. More commonly used.

1. Assess IV site for s/s infiltration, phlebitis, infection, and leaking.
2. Check physician’s order, client allergies, baseline VS, compatibility of IV fluid with medication prescribed.
3. Follow 3 checks of medication administration.
4. Clamp tubing, spike bag, fill drip chamber ½ full, and prime tubing.
5. Clean upper injection port on primary tubing with alcohol.
6. Attach secondary tubing to port.
7. Open clamp on secondary tubing and regulate infusion rate using roller clamp on primary tubing.
8. Check infusion, IV site, and client response in 10 minutes and frequently during the infusion.
9. After piggyback is infused, reset primary line to infuse at prescribed rate.

Other types of intermittent infusion delivery include:
- syringe pump or mini-infuser – often used with patient controlled analgesia (PCA).
- volume controlled infusion set or buretrol – used when volume control is critical.
- IV push or bolus – medication given directly into circulatory system.
Changing Solution and Dressing

Purpose: To maintain the infusion of required fluids; maintain sterility of IV system and decrease incidence of infection and phlebitis; maintain patency of the IV tubing; prevent infection at the IV site and the introduction of microorganisms into the bloodstream.

1. Assess IV site, allergies to tape, iodine or chloroprep, patency of system, appearance of dressing, date and time of last dressing/tubing change.
2. Check physician's orders for changes in IV orders, solution, or rate.
3. Follow 3 checks of medication administration.
4. Obtain, label, and hang new solution.
5. Prepare equipment for dressing change: 2x2 gauze, new dressing, tape, and alcohol/betadine or chloroprep.
6. Place a towel under the client's arm.
7. Don gloves and gently remove old dressing in the direction of the insertion of the catheter so as not to pull the catheter out.
8. Remove the tape holding the catheter in place (chevron), clean the IV site according to agency policy, replace chevron and apply new dressing. Tape down the tubing. Apply label to new dressing.
9. Regulate the infusion.

Intermittent Devices (Saline or Heparin Lock, Heplock, INT)

Purpose: To permit the administration of IV fluids on an intermittent basis. Provides greater freedom of movement for client. Provides intravenous access in case of emergency.

1. Assess IV site for s/s infiltration, phlebitis, infection, and leaking.
2. Check physician's order.
3. Prepare equipment: Draw up 2 mls of sterile saline in blunt cannula syringe. Prime intermittent infusion cap with sterile saline. May use heparin if agency dictates. Save the remainder to flush after lock is in place.
4. Gather tape, alcohol, and 2x2 gauze.
5. Clamp IV tubing and remove any tape from the site.
6. Don gloves. Place 2x2 under the catheter hub. Hold the hub securely, remove old tubing from the hub and insert primed saline lock.
7. Flush the lock with saline to insure patency. Follow with heparin per protocol.
8. Tape lock in place. Document date and time IV converted to lock and site condition.

Blood Administration

Purpose: To restore blood volume after severe hemorrhage, restore the capacity of the blood to carry oxygen, provide plasma factors such as antihemophilic factor (AHF) or platelets.
Under Ohio law, LPNs cannot administer blood, but frequently monitor the client who is receiving blood or blood products; therefore, it is imperative that you know s/s of transfusion reaction.

1. Adverse reactions include: hemolytic (incompatibility), febrile, allergic, circulatory overload, sepsis. S/S to watch for: chills, fever, headache, backache, flushed skin, itching, wheezing, chest pain, vomiting, and dyspnea. See table on page 490, Table 18-3, Techniques

2. Blood is hung via a special tandem set and should only be hung with 0.9% normal saline.

3. Use an 18 gauge or larger IV catheter. Anything smaller may lyse the blood cells and render the blood useless to the client. Some agencies allow 20 gauge for blood.

4. Monitor VS regularly according to agency policy. For example: immediately before starting the transfusion, 15 minutes after, 30 minutes later, and then hourly. Be aware of any rise in temperature or pulse and report immediately. The earlier the reaction, the more severe it usually is.

5. Monitor the IV site carefully. Note any change in the drip rate, especially if it begins to slow down (IV sites can clot off) or if it speeds up (danger of fluid volume overload).

6. Any single unit of blood should hang no longer than 4 hours.