

Mosby's Nursing Video Skills

Procedure Guideline for Administering Intravenous Medications by Piggyback

1. An IV piggyback is a small bag of solution attached to a primary infusion line or intermittent venous access device to deliver medication over a specified period of time. As you prepare to give IV medication by piggyback, keep in mind the six rights of medication administration; right medication, right dose, right patient, right route, right time and right documentation. See the video skill “Ensuring the Six Rights of Medication Administration.”
2. Ensure the drug is compatible with the primary running IV solution and with any other medication the patient is receiving.
3. Prepare medication for only one patient at a time.
4. Pause twice during your preparation to compare the medication label carefully with the medication administration record (MAR).
5. Take medication to the patient at the correct time, in accordance with your agency’s policy. Give time-critical medications (e.g., “stat” and “now” doses) at the precise time ordered.
6. Introduce yourself to the patient and family, if present.
7. Perform hand hygiene and provide for the patient’s privacy.
8. Identify the patient using two identifiers according to agency policy. Compare these identifiers with the MAR or medical record. Ask the patient if he has any known allergies.
9. Check the expiration date of the IV medication. At the bedside, again compare the MAR or computer printout with the names of the medications on the medication labels. This is your third accuracy check.
10. Discuss the purpose of each medication, its action, and possible adverse effects. Explain that you will give the medication through the patient’s existing IV line. Allow the patient to ask questions. Encourage the patient to report any symptoms of discomfort at the IV site.
11. Administer the piggyback IV infusion:
 - A. Apply clean gloves. Assess the IV site for any signs of phlebitis or infiltration.
 - B. Use an antiseptic swab to cleanse the port of the Y site closest to the patient. Allow it to dry. Attach a prefilled syringe with 0.9% sodium chloride to the port, kink off the tubing above the Y site, pull back slightly on the plunger and assess for blood return. Then slowly flush the line with 2 to 3 mL of NS according to agency policy. Withdraw the syringe.
 - C. To set up the piggyback, remove the secondary infusion set from the packaging.
 - D. Close the roller clamp. Insert the spike end of the tubing into the medication bag, keeping it sterile. Then hang the piggyback.
 - E. Squeeze the drip chamber and fill it halfway. Open the roller clamp and fill the tubing until all of the air has been displaced by the solution. Allow the solution to drip into a trash receptacle.
 - F. Cap the tubing and wipe the infusion port above the IV pump with an antiseptic swab.
 - G. Then connect the secondary set tubing to the port of the main IV line. Twist the luer lock fitting to secure the tubing.
 - H. Use a hook to lower the primary infusion bag so that the bag of the piggyback solution is now above it.
12. *Option: Saline lock.* Follow these steps to flush and prepare the lock:
 - A. Clean the injection port with an antiseptic swab, and allow it to dry completely.

- B. Attach a syringe prefilled with 0.9% sodium chloride to the injection port of the saline lock, release the clamp, pull back gently on the plunger of the syringe, and check for blood return. Flush the saline lock with 0.9% sodium chloride by pushing slowly on the plunger. As you proceed, observe the site for infiltration. Remove the syringe.
 - C. Wipe off the port again with an antiseptic swab, let it dry, and insert the tip of the piggyback infusion tubing via needleless access.
 - D. Twist the luer lock fitting to secure the tubing and secure it with tape as needed.
13. Regulate the flow of the piggyback medication by setting the rate on the infusion pump or adjusting the regulator clamp on the primary tubing.
 14. Infuse the medication over the period of time required by your agency or recommended by a reliable medication reference.
 15. Remove and dispose of your gloves. Perform hand hygiene.
 16. Once the piggyback infusion has emptied, the force of gravity will automatically restart the primary infusion on a continuous IV. If needed, regulate the primary IV infusion to the ordered rate.
 17. Discard the piggyback bag and tubing in a puncture-proof, leak-proof container or leave them in place so the tubing can be used again with the next piggyback infusion.
 18. Saline lock: Disconnect and cap the tubing, clean the port with alcohol, and flush the saline lock with 2 to 3 mL of sterile 0.9% sodium chloride, per agency policy. Maintain the sterility of the IV tubing between intermittent infusions. Remove and discard your gloves and perform hand hygiene.
 19. As part of your follow up care, remember to stay with the patient during the first several minutes of the infusion to observe for any signs of an allergic or other adverse reaction to the piggyback medication.
 20. Help the patient into a comfortable position, and place toiletries and personal items within reach.
 21. Place the call light within easy reach, and make sure the patient knows how to use it to summon assistance.
 22. To ensure the patient's safety, raise the appropriate number of side rails and lower the bed to the lowest position.
 23. Dispose of used supplies and equipment. Leave the patient's room tidy.
 24. Document and report the patient's response and expected or unexpected outcomes, including the IV fluid solution and hourly volume rate.