MicroClave® Clear – Drawing Blood through Your Child’s Central Line Using a Syringe

Using a central line to draw blood is a safe, easy way to draw blood samples needed to diagnose and treat your child. This handout explains how you can safely do this at home. For young infants, flushing volumes may vary. Please talk with your doctor, nurse, or nurse practitioner.

Supplies

- Gloves
- Alcohol wipes
- Angel Wing Transfer Device
- 2-3 5 mL syringes
- 1-2 10 mL syringe(s) of saline or ______ mL, as specified
- Blood tubes for samples (color depends on orders)
- 1 5mL syringe of heparinized saline or ______ mL, as specified

Steps: Before going home, a nurse will show you how you can safely do these steps at home.

1. Wash your hands and put on gloves.
2. Clean the top of the needleless connector (MicroClave® Clear) with an alcohol wipe for 15 seconds and allow to dry.
3. Using sterile technique, with central line clamped, attach an empty 5 mL syringe to the needleless connector.
4. Unclamp catheter and pull back slowly on the syringe to draw 3 mL of “waste” blood into the syringe if the line was capped, 5ml if the line was running. This will remove the heparinized saline that is in the line.

5. Remove the “waste” syringe and attach a new 5 mL syringe (or the size of syringe needed to draw the volume of blood required for the ordered labs).

6. Pull back slowly on the syringe to draw the amount of blood needed to fill the blood tube (s).
   • If blood does not flow into the tube: Flush the line through the needleless connector (MicroClave® Clear) with 10 mL of saline using a push-stop-push method. Then, repeat steps 1 through 5. If there is still no blood flow, contact your child’s doctor or nurse.

7. Repeat step 5 if more than 5 mL of blood is needed to fill the blood tubes.

8. When finished, remove the syringe.

9. Flush the line through the needleless connector (MicroClave® Clear) with 10 mL (or _____ mL) of normal saline using a push stop push method followed by 5 mL (or________mL) of heparinized saline.
After flushing, if you can see blood in the needleless connector, remove the connector and replace with a new one. See “Changing the Needleless Connector” (MicroClave® Clear) below.

10. Clamp the line while holding down the plunger and remove syringe at the same time.

11. Remove cap from angel wing transfer device. Attach the syringe filled with blood.

12. Push the blood tube onto the inner needle of the angel wing transfer device. Blood should enter the tube. Blood will not fully fill the tube. This is normal. Do not try to push more blood into the tube.

13. When blood flow stops, attach next blood tube. If more than 5 mL of blood is needed, always attach the syringe of blood to the angel wing before you attach the blood tube.

14. When finished, put the angel wing device and all the syringes into a plastic needle disposal box.

**Changing the needleless connector (MicroClave® Clear)**

The needleless connector needs to be changed every three days or as directed by your homecare provider. Note: change sooner if blood is visible in the connector. The connector is sterile at the connector end.

1. Wash your hands for 60 seconds.

2. Remove the plastic cover from the syringe. Push air out of the syringe. Open a 4x4 sterile gauze and drop it onto the sterile field.

3. Put on mask and sterile gloves.

4. Open the needleless connector package. Use one piece of sterile gauze to pick up your saline syringe. Connect the syringe to the end of the connector. Twist on completely. If the tip of the syringe touches anything other than the end of the catheter, stop, and replace the syringe.

5. Fill the needleless connector with saline solution by pointing the blue protective cap found at the other end of the connector up towards the ceiling. This will remove all air from the connector. Leave the syringe filled with saline attached to the connector.
6. Open one of your alcohol pads. Hold a sterile 4x4 gauze in your non-dominant hand and pick up your child’s line above the old connector.

7. Cleanse the connection between the connector and your child’s line with an alcohol wipe for 15-20 seconds and let it dry.

8. Clamp the catheter line.

9. Remove the old needleless connector from the catheter. Hold the line without touching the end of the catheter opening.

10. Remove the blue protective cap from the new needleless connector. Attach the connector to the end of the catheter. Do not over tighten. One firm turn onto the line is sufficient.

11. Unclamp the line.

12. Flush the line using push-stop-push method with the remaining flush solution already attached to the needleless connector.

13. As you complete the flush, **clamp the line while holding down the plunger and removing syringe** at the same time.