

Balloon Notes

Caring for Your Child



About Your Child's Central Line (Hickman or Broviac)

A central line is a long skinny tube made of soft flexible plastic and can also be called a **Hickman** or **Broviac**. It is put in a large vein and the tip of it is near the heart. The other end of the central line is outside the body. It comes out through the skin and is usually on the chest (called the exit site).



Why does my child need a Central Line?

A Central line is used when your child may need intravenous (IV) treatment for a long time. These kinds of treatments may include IV nutrition, chemotherapy or IV medications. You may also have blood taken through the central line for tests. This can decrease the number of needle sticks your child may need. Your child may only have a central line while in the hospital or may go home with a central line.

Care of My Child's Central Line

Not everything about central lines will be covered in this handout. To help you learn, each time a nurse changes the dressing or gives a medicine, please watch closely and ask questions. When your child is ready to go home with the central line, your home care agency will continue to help you in your care at home. If your child goes home with a central line, your home care agency may provide the following services:

- Supplies for the central line
- Dressing change and maintenance
- Cap change and maintenance
- After hours contact for questions and concerns

Cleanliness

In the hospital and at home, cleanliness is a key factor in lowering chances of infection. It is very important to wash your hands and have a clean work area. Wash your hands for 15 seconds (or use an alcohol-based hand sanitizer) before touching the central line or any supplies used with the central line. This is very important. Second, have a clean work area and wear clean gloves. Your child should bathe regularly and shampoo his/her hair to prevent infection. Remember to cover the central line with plastic before showering or bathing. Please do not let the central line go under water or come in contact with water.



Flushing Directions

Flushing the central line assures that the central line remains clear. If the central line is not being used regularly, it can become blocked with blood. The catheter is flushed with saline (sterile salt water solution) then filled with a medicine called Heparin. Heparin keeps the blood from clotting in the central line. You will be taught how to do these flushes. The catheter should be flushed at least every 24 hours.

Flushing Directions:

The Saline Flush
amount is _____ mL

The Heparin Flush amount is
_____ mL
(Concentration: _____ unit/mL)

1. Wash hands with soap and water for 15 seconds (or use alcohol-based hand sanitizer). Dry with a paper towel or clean cloth. Put on clean gloves.

2. Scrub the end of the clear cap of the central line with an alcohol swab for 15 seconds and allow it to dry for 15 seconds. Do not blow or fan to dry. Make sure that nothing touches cap after it is cleaned.



3. Unclamp the central line.

4. Attach the saline syringe into the clear cap (by screwing it on).

5. Check for blood return by slowly pulling back on saline syringe plunger. Once blood is seen in the catheter, flush with saline and remove the saline syringe.



DO NOT FORCE THE FLUSH IF YOU CANNOT EASILY PUSH IT IN. CALL YOUR HOME HEALTH NURSE OR PROVIDER IF UNABLE TO FLUSH.

6. Scrub the end of the clear cap of the central line with an alcohol swab for 15 seconds and allow it to dry for 15 seconds. Do not blow or fan to dry. Make sure that nothing touches cap after it is cleaned.



7. Attach the heparin syringe into the clear cap (by screwing it on), and then push the heparin flush slowly. Remove the syringe and clamp the central line.



8. Repeat this process starting at step 1 with each clear cap, if there is more than one clear cap.

Cap Change Directions

Change the caps every 7 days or as needed when dirty

1. Clean your work surface with bleach based cleaner or place clean barrier on a surface that you are unable to clean, such as a bed or wooden table.
2. Wash hands with soap and water for 15 seconds (or use alcohol-based hand sanitizer). Dry with a paper towel or clean cloth.
 - You may use a helper for cap changes. Please have them wash their hands too.
3. Clamp the central line. Place a mask on yourself and shield your child's face if appropriate.
4. Wash hands with soap and water for 15 seconds (or use alcohol-

based hand sanitizer). Dry with a paper towel or clean cloth.

5. Open the sterile cap change kit onto the clean work area. Make sure all of your supplies are in your kit: sterile gloves, sterile caps (3), sterile alcohol prep (9), sterile 4x4 gauze (6), mask (2)
 - If you do not have a kit, create your sterile field and open your sterile cap change supplies in the sterile area.

6. Put on sterile gloves and arrange the supplies.

7. With one hand pick up sterile gauze from the sterile field and wrap the gauze around the area below the cap to hold up the line without touching the line to your sterile gloves. Place the sterile drape under the central line.



8. Using the sterile gauze to hold the line, have your helper open 2 alcohol packages without touching the swab inside. Grab the alcohol swabs without touching the outside of the package. Clean the connection site between the cap and the catheter for 15 seconds and then let it dry for 15 seconds. Then drop your alcohol swabs outside the sterile field.



9. Carefully unscrew and remove the old cap using new sterile gauze. Drop the old cap outside of the sterile field.

10. Have your helper open another alcohol package without touching the swab inside. With your hand that is not holding the catheter, grab the alcohol swab without touching the outside of the alcohol package and clean around the grooves of the catheter making sure not to clean over the top. Clean for 15 seconds and then let it dry for 15 seconds. Keep the catheter faced downward so nothing falls into the lumen.



11. Connect new cap to hub of central line.

Dressing Change Directions

Change the dressing every 7 days or when dirty, loose, or not sealed

1. Clean your work surface with bleach based cleaner or place clean barrier on a surface that you are unable to clean, such as a bed or wooden table.
2. Place a mask on yourself and shield your child's face if appropriate.
3. Wash hands with soap and water for 15 seconds (or use alcohol-based hand sanitizer). Dry with a paper towel or clean cloth. Put on clean gloves.
 - You may use a helper for dressing changes. Please have them wash their hands too.
4. Carefully take off your child's old dressing and put it in the trash.
5. Open the dressing change kit on your clean work area. Make sure all of your supplies are inside your kit: sterile gloves, ChloroPrep stick, BioPatch™, and clear dressing.
5. Look at the skin around the catheter site and check for any signs of infections, like **swelling, pus, redness or pain**.
6. Wash hands with soap and water for 15 seconds (or use alcohol-based hand sanitizer). Dry with a paper towel or clean cloth.
7. Put on sterile gloves.
8. Take the ChloroPrep stick from your dressing change kit; if you have the package of 3 swabs, open package; if you have the sponge with plastic handle, "crack" the wings to let the fluid soak the sponge. Scrub the skin going up and down and back and forth cleaning the entire area that will be under the dressing including the central line. Scrub the skin for at least 30 seconds. Clean up the central line to the clamp.
 - If you have 3 sponges, use them all for a total of 30 seconds (10 seconds for each sponge).
9. Allow the skin to dry for at least 30 seconds. Make sure the skin looks dry. Do not blow or fan the area to dry.
10. Place the BioPatch™/white round spongy patch on the top of the central line where it comes out of the skin. Make sure the



shiny/blue side is facing up and the foam side is down next to the skin. The slit needs to line up with the catheter where it lies on the skin.

11. Coil the central line so that all of the thin part of the line will be under the dressing and the end with the cap will be up and away from potential contamination (such as diapers, gtubes, ostomies, tracheostomies, etc...).

12. Place the clear dressing over the site (example: Tegaderm™).
Date the dressing.



Things to Remember

1. Everyone with a central line should have a “Go Bag” that contains the following:
 - Clear dressing if reinforcement needed
 - Alcohol wipes and Chlorhexidine wipes
 - Sterile gauze and tape
 - Clear cap(s)
 - Pre-filled Heparin and saline syringes
 - Plastic (blunt edge) clamps if accidental line break
 - *Take this emergency kit with you everywhere you go. Ask your home health provider for these supplies.*
2. NO WATER SHOULD TOUCH THE DRESSING OR TUBING.
 - Do not swim with the central line.
 - Cover the central line with protective plastic covering when bathing or showering.
 - **If the central line dressing gets wet it should be changed;** contact your home health nurse or provider.
 - **If the clear cap gets wet it should be changed;** contact your home health nurse or provider
3. Care should be taken to protect the site if you are involved in contact sports, e.g. soccer or basketball.
 - Your doctor should approve these activities before you participate.
4. Do not use pins or scissors near the central line.
5. Do not scratch or pull at central line dressing.

When to Call Your Doctor

- Redness, swelling, warmth or pain at the insertion site
- Drainage or pus from the insertion site
- Fever above 100.4°F or shaking chills
- Shortness of breath or any chest pain
- Flu-like symptoms
- Pain in ear or central line arm
- Central line pulled out partially or completely
- Bleeding at central line site

When to Call Your Home Care Nurse

- Dressing is dirty, loose, not sealed, or wet
- Central line hard to flush or unable to flush at all
- Tubing that splits or leaks
- Central line pulled out partially or completely
- Cap is bloody or dirty

Problem	Possible Cause	What To Do
Fever, Chills Tenderness, redness, or pus at central line site Swollen arm	Infection	Check your child's temperature Call the doctor right away
Trouble flushing the central line Unable to give medicines or fluid into central line	Central line may be clamped Central line or tubing may be kinked	Unclamp it Remove the kink If the central line is not kinked or clamped, do not force the solution into the tube Call the home care nurse to report the problem
Fluid leaking from the central line	Injection cap not screwed on securely A hole in the central line	Tighten the injection cap. If you see a leak in the line, clamp it (or fold it over and pinch it) between the damaged area and the skin and call your home care nurse, clinic, or emergency room right away.
Skin redness where the tape was	Sensitivity to tape	The nurse may need to change the type of dressing or tape used.
Central line comes partially out		Cleanse site with chlorhexadine, if available, and apply adhesive bandage Do not push central line back in Call your doctor or home care nurse immediately Do not give medicine through the central line
Central line comes completely out		Place a sterile gauze pad on the site and press firmly until the bleeding has stopped (2 to 5 minutes). After the bleeding has stopped, apply a bandage snugly. Save the central line and call your doctor or home care nurse.

CENTRAL LINE INFORMATION

Central Line Brand _____

Central Line Size _____

Central Line Length _____

Heparin Flush Concentration _____

Volume (Amount) of Flush _____

Frequency (How Often) of Flush _____

Cap Change Day _____

Dressing Change Day _____

Home Care Agency _____

Contact Name _____

Contact Number _____

Supply Company _____

Home Care Pharmacy _____

Doctor _____