

Module 5 – Your Dialysis Catheter

Important Tips for a Healthy Catheter

- **Think clean.** We cannot emphasize this enough. Protect yourself from infection. Wash your hands and use good technique every time you use your catheter.
- Never touch the ends of the catheter. The catheter tip sits inside your heart. Bacteria (germs) that touch the end of the catheter or TEGO connector can travel right to your heart.
- If you accidentally touch one of the open catheter lines or if you find that your catheter TEGO connector cap has fallen off or is damaged, soak the end of the line with disinfectant wipe for 1 minute. Attach a new TEGO Connector cap. Call your nurse if the TEGO connector cap is missing.
- Infections that are caught early are more easily treated. Take your temperature regularly. Call your nurse or doctor immediately and go to the hospital emergency room if your temperature is 37.5°C or higher or if you have rigors [uncontrollable shaking] and chills.
- Do not soak in a tub or go swimming with your catheter.
- Read "Showering with a Hemodialysis Catheter" at www.bcrenalagency.ca. Click: Health Info → Managing My Care → Vascular Access → Catheter.



1. Watch for air

- Always close your catheter clamps. Make sure they are closed every time you change your TEGO connector caps, connect a syringe, or attach a bloodline.
- Keep syringes upright when you check your flows so that air bubbles get trapped in the top of the syringe.

2. Changing your dressing

- Change your dressing _____ days per week (talk to your nurse).
- Many people change their catheter dressing after bathing.
- Try to keep your dressing dry. If it gets wet, change it.
- Use a mirror when changing your dressing.
- If you notice pain or redness around the catheter or any drainage, call your nurse.

3. Blood flow changes

- Changes in your catheter blood flow and changes to usual arterial/venous pressure readings can mean there is either a clot forming in your catheter or a fibrin sheath may be growing around the tip of your catheter. You may need to change your TEGO connector cap.
- If this happens, tell your nurse. A medication "CATHFLO" can be injected into your catheter line to safely dissolve the clot or fibrin sheath.

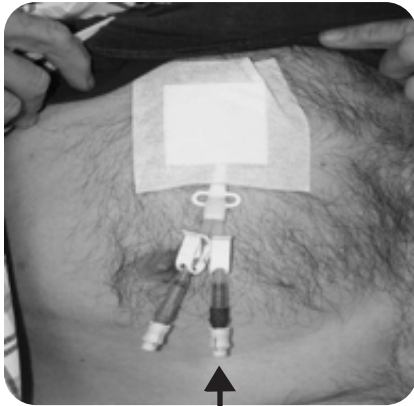
4. Only use your catheter for dialysis. You catheter should never be used for anything other than hemodialysis.

How to change your catheter TEGO connector caps



Important points to remember:

- TEGO connectors are changed weekly. You may need to change them more frequently if you notice a clot in the end or the blood is not moving well.
- If the TEGO Connector cap becomes loose or falls off, make sure the catheter remains clamped. You are at risk for infection and air entering your bloodstream, and need urgent care. Call your nurse and go to your hospital emergency room.



TEGO connector cap



Supplies:

- 2 clean drapes
- Disinfecting wipes (several)
- TEGO connector caps
- 2 gauze packages (4x4's)
- Tape (1 inch)
- 2-20 mL pre filled saline syringes or 4-10mL pre filled saline syringes
- 1 bottle of heparin 1000 units/mL
- 21 gauge needle
- One 10ml syringe
- 2 plastic clamps
- Small garbage bag
- Table mirror with a stand
- Face mask
- Hand sanitizer

Optional Supplies

- Blood detector (enuresis alarm) if you will be sleeping while on dialysis.
- Gloves


Instructions

1. Wash your hands for a full minute.
2. Remove gauze dressing from catheter lines.
3. Sanitize hands and put on mask.
4. Prepare your supplies on a clean drape.
5. Carefully peel open TEGO connector cap package. Leave blue cap on the TEGO connector cap.
6. Tape or clamp second clean drape to your shirt under the catheter lines.

7. Using a disinfecting wipe, cleanse each TEGO connector cap using friction scrub for 30 seconds. Be sure to scrub around the TEGO/Catheter connection. Use new wipes for each TEGO connector cap.
8. Remove the 4 x 4 gauze and place catheter lines on a sterile 4 x 4 gauze.
9. Air-dry the catheter lines for 1 minute.
10. Ensure the catheter clamps are closed. Carefully remove old TEGO Connector from arterial limb and discard. Scrub the sides (threads) and end of the hub thoroughly with friction, making sure to remove any residue (e.g., blood) for 30 seconds. Discard wipe. **Do not touch open ends with your hands.**
11. Remove protective blue end from new TEGO connector cap. Attach male luer end of TEGO connector to the arterial limb of the catheter. Leave catheter clamped and move to venous limb of catheter.

Did you
KNOW?

A Luer Lock is a screw connection on a syringe or TEGO Connector Cap that creates a leak-free seal.



Male Luer end of TEGO Connector Cap

12. Carefully remove old TEGO connector from venous limb and discard. Scrub the sides (threads) and end of the hub thoroughly with friction, making sure to remove any residue (e.g., blood) for 30 seconds. Discard wipe. **Do not touch open ends with your hands.**
13. Remove protective blue end from new TEGO connector cap. Attach male luer of TEGO connector to the venous limb of the catheter. Leave both clamps closed.

Starting dialysis using a catheter

Have machine set up and ready to go BEFORE you open up your catheter.

1. Wash hands.
2. Prepare your supplies on one of your drapes. Draw up your initial dose of heparin using a 21 gauge needle, a 10mL syringe and an alcohol swab.
3. Remove old gauze covering the catheter (never use scissors as this may accidentally slice the catheter).
4. Cleanse hands using hand sanitizer. Let air dry.
5. Ensure clamps are closed.
6. Hub-scrub the arterial lumen TEGO connector with a disinfectant wipe. Scrub the sides (threads) and ends of the hub thoroughly with friction for 30 seconds, making sure to remove any dry blood. Discard wipe.
7. Attach an empty 10 mL syringe to arterial lumen TEGO.
8. Open arterial lumen clamp and withdraw locking solution, blood and/or clots (total 5 mL). Close clamp. Discard syringe.
9. Assess catheter function by attaching a new 10 mL syringe to the arterial lumen TEGO connector and aspirate 3 – 5 mL of blood to check the flow of the lumen 3 times to evaluate lumen flow. Clamp arterial lumen.
10. Repeat steps 1-5 using the venous lumen. Pre-dialysis blood work can be drawn at this time.
11. Attach a 20 mL (or 10 mL) prefilled normal saline syringe to the arterial lumen TEGO connector. Flush lumen using a forceful flush method. Repeat if using 10 mL syringe. Clamp lumen. (Total: 20 mL per lumen).

12. Repeat step 7 for the venous lumen TEGO connector.
13. Replace the 20mL syringe on the venous line with the heparin loading dose syringe. Push heparin in and pull back and forth on syringe plunger 3 times. Close clamp on the lines.

Connect bloodlines and initiate dialysis:

14. Remove syringe from the **arterial line** TEGO connector and discard. Ensure there is no air in the arterial blood line. Connect the arterial blood line to the arterial TEGO connector without touching the ends. Ensure connections are tight.
15. Remove syringe from the venous line TEGO connector and discard. Ensure there is no air in the venous blood line. Connect the **venous blood line** to the venous line TEGO connector without touching the ends. Ensure connections are tight.

End of dialysis using a catheter

See your machine flip chart or manual for rinseback procedure.

Follow these instructions only after your blood has been returned.



Supplies:

- 2 clean drapes
- Disinfecting wipes (several)
- 2 gauze packages (4x4's)
- 2-20 mL pre filled saline syringes
- 2-5mL pre filled Sodium Citrate Syringes

1. **Use hand sanitizer to cleanse hands.**
2. **Prepare your supplies on your drape.**
 - a) Prepare your sodium citrate 4% syringes. Using the

plunger, expel excess sodium citrate. You need _____mL in each syringe.

- b) Open disinfecting wipe packages.
3. Clip drape to your shirt under your catheter lines using two clamps or tape.
4. Give back your blood and take sitting and standing blood pressures (see your machine training manual or flipchart).
5. Cleanse hands again to prepare for take-off.
6. Scrub the arterial and venous TEGO connectors with a disinfecting wipe. Scrub the sides, and connector, thoroughly with friction, making sure to remove any residue (e.g., blood) for 30 seconds. Discard wipe. Place lines on a dry 4 x 4-inch gauze. Allow lines to dry for one minute.
7. Check that both catheter and bloodlines are clamped.
8. Carefully separate arterial bloodline from arterial line TEGO connector.
9. Wipe the TEGO connector cap end with a disinfecting wipe without touching the cleaned end; attach a 20mL prefilled saline syringe.
10. Open the arterial line clamp and push through saline.
11. Remove empty syringe and replace with pre-prepared sodium citrate 4% syringe. Open clamp on arterial line and insert sodium citrate 4%. Clamp arterial line.
12. Repeat above steps with the venous catheter line.



Important to note:

My catheter lines contain

A: _____

V: _____ of sodium citrate 4%.

Changing your dialysis catheter dressing



Supplies:

- 2 clean drapes
- Disinfecting wipes or sticks (several)
- 1 tape (1 inch)
- 2 plastic clamps
- Small garbage bag
- Face mask
- Hand sanitizer
- Dressing- discuss with your nurse the best dressing for you.



Dialysis catheter dressing

1. Wash your hands for a full minute.
2. Prepare your supplies.
 - a) Open your disinfecting wipes or sticks.
 - b) Open your dressing and place on the drape. Do not remove protective seal.
 - c) Clip the second drape onto your shirt (if doing dressing change while clothed).
 - d) Put on your mask.
3. Remove old dressing. Look for any changes in your skin condition. Is it red? Is there drainage? Is there pain? Report anything unusual to your nurse.
4. Cleanse hands using hand sanitizer
5. Clean site using disinfecting wipes or sticks. Clean from using a waffle motion. Discard wipe and repeat this step.
6. Allow to air dry. (30 seconds-1 minute)
7. Attach new dressing. Peel off backing and attach to skin overlapping about two inches of the catheter under the dressing. Avoid touching the middle part of the dressing.

