How to Care for Your Hemodialysis Catheter

Patient Guide
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How to Care for Your **Hemodialysis Catheter** / Patient Guide
Introduction

Your kidneys play an important role in filtering metabolites from your blood and removing extra fluids from your body. If your kidneys are not working well, your doctor may instruct you to receive hemodialysis treatments.

During hemodialysis treatments, blood is removed from your body through a special tube called a hemodialysis catheter. The blood is sent to a hemodialysis machine where it is cleansed and filtered, just like it would be in your kidneys. The cleansed blood is then returned to your body through the same catheter.

A long-term hemodialysis catheter is placed in a large vein near your heart where blood flow is high. This allows the hemodialysis machine to cleanse your blood as quickly and efficiently as possible. The catheter can be used for weeks, months, or even years. Therefore, it is important to take good care of your catheter.

This booklet includes instructions on how to care for your catheter and what to do if any problems arise. It also contains answers to questions patients commonly ask. It is important to note, however, that information in this booklet is only a reference. You should always follow any specific instructions from your doctor or nurse.
What is a Long-Term Hemodialysis Catheter?

A long-term hemodialysis catheter is a soft, hollow tube about the size of a large drinking straw that is used to take and return blood from your body during dialysis.

The catheter is made from strong, medical-grade plastic. The tip of the catheter is placed into a large blood vessel near the atrium of the heart. Along each catheter is a small cuff. Your tissue grows into this cuff to help keep the catheter in place and to help keep bacteria from entering the body.

The end of the catheter, or the hub, is taped to the outside of your body for comfort and safety. Each leg of the hub is called a “lumen.” One lumen carries blood from your body to the dialysis machine. The other lumen returns the cleansed blood from the dialysis machine back into your body. Each lumen has a screw-on end cap and a plastic clamp to keep blood from leaking out or air from getting in.
What is a Long-Term Hemodialysis Catheter?

Cuff

Venous Lumen
(carries blood to your heart)

End Caps

Clamp

Arterial Lumen
(carries blood to dialysis machine)

End Tip
(placed near the heart)

Equistream® Long-Term Hemodialysis Catheter (shown)
How to Care for Your Hemodialysis Catheter / Patient Guide

**Interior**
Placement View

**Exterior**
Placement View

Exit Site
Where Does the Catheter Go Inside My Body?

Your doctor will place the catheter under the skin on your chest or neck and into the large vein that leads to your heart. The tip of the catheter is placed close to your heart because of the large volume of blood flow, which is needed for dialysis. Sometimes your doctor will choose to place the catheter in a vein in your leg. This is called a femoral placement of your dialysis catheter.

You will only see the end of the catheter as most of the catheter is “tunneled” underneath your skin and through your vein to keep the catheter securely in place. The place where the catheter exits your body is called the “exit site.” It is important to take special care of the exit site to prevent infection. How to properly take care of your catheter will be explained later in this booklet.
Taking Care of Your Catheter

It is very important to take proper care of your catheter so that you can avoid infection and receive effective dialysis treatments. Catheters can stay safely in place for weeks, months, or even years if they are properly cared for. Taking care of your catheter will help you remain healthy and enjoy many activities. Always follow any specific instructions from your doctor or nurse.

Be Gentle With Your Catheter

- Wash your hands often. (See instructions on page 11)
- Try not to touch the catheter or dressing.
- Keep your catheter clean and dry.
- Do not use sharp objects or scissors near your catheter.
- Take care not to pull or twist your catheter when getting dressed or undressed, removing a blanket, or changing the dressing.
- Be careful when lifting small objects, children, or pets.
Hand Washing Instructions

• First, wet your hands with warm water.
• Apply enough soap to cover all surfaces of your hands.
• Rub your hands together vigorously covering all surfaces of the hands and fingers.
• Rub the palms together.
• Rub the back of your hands.
• Rub your palms together with your fingers interlaced.
• With your fingers flexed, rub the back of your fingers with your palms. Pay extra attention to your knuckles.
• Scrub each thumb by grasping it with your opposite hand and rotating your hand around your thumb.
• Rub your finger tips in your opposite palm in a circular and back-and-forth manner. For your fingernails and nail beds use a soft brush.
• Rinse hands with warm water and dry completely with a disposable towel.
• Use the towel to turn off the faucet.

Note: Do not use hot water to wash your hands because repeat exposure to hot water may increase inflammation of the skin.
Taking Care of Your Catheter (continued)

Keep Your Catheter Clean and Dry
Bacteria grow naturally on your skin. Under certain conditions they can cause infection if they enter your body through the exit site. You should always keep the exit site covered with a sterile dressing or bandage. The dressing should be replaced if it gets dirty, becomes wet, or is no longer sticking to the area around the exit site. Ask your doctor or dialysis nurse for instructions on caring for your catheter at home, including how to change your dressing at home. Keep an extra dressing kit available in case you need to change your dressing in between treatments.

Avoid Showering or Swimming
Avoid showering, swimming, or any activity that may cause your catheter or catheter dressings to become wet. Any type of moisture may cause or accelerate infection. Your doctor may allow you to bathe, but you must be careful not to get the catheter, exit site, or dressing wet. If approved by your doctor, the exit site must first be covered with a waterproof dressing.
Clamping Your Catheter
Each lumen should be clamped shut and with the cap tightly screwed on whenever the catheter is not in use. Your catheter should also stay clamped when changing the caps or when connecting the tubing for dialysis to your catheter. This keeps blood from leaking out or any bacteria or air from getting into your body. If your catheter clamp breaks or end cap comes off, contact your doctor and follow his/her instructions. We recommend that you always have an extra end cap available.

Prevention is Key
If you have any questions, or if you notice anything unusual such as redness or swelling, pain or fever, or a damaged or broken catheter, call your doctor or nurse immediately. It is always easier to care for a problem if it is handled early. You can make a difference!

You are also welcome to call the Bard Clinical Information Hotline at 800-443-3385. Our friendly nurses can answer many of your questions.
Possible Problems

Taking proper care of your catheter will prevent many problems. But, it’s important to know what to do just in case you do have a problem. The following is a list of possible problems you may face and instructions on what to do. You can make a difference!

**Problem:** Skin Irritation over the Tissue Ingrowth Cuff  
**Signals:** Pain, soreness, or redness of the skin.  
**What To Do:** Discuss with your doctor or nurse.  
**How To Reduce the Risk:** Avoid tight clothing, especially over the bulge of the cuff. Avoid touching or pulling on the catheter.

**Problem:** Loose or Disconnected End Cap  
**Signals:** The cap will either be loose or come off.  
**What To Do:** First, wash your hands. Then, make sure the clamp on the catheter is closed. If the cap is loose, tighten it. If the cap comes off, first clean the end of the lumen with medical grade, sterile alcohol and then put a new cap in place. Do not reuse the old cap. Call your doctor as soon as possible and let him/her know that the cap came off and how long it was off.  
**How To Reduce the Risk:** Check cap morning and night and before and after activities to make sure it is tight.
**Problem:** Infection  
**Signals:** Fever, chills, low energy or generally not feeling well. At the exit site, you may have pain, redness, swelling, blistering or oozing. You may also feel heat or notice a foul odor at the exit site.  
**What To Do:** Notify your doctor or nurse immediately. Go to the Emergency Room if you cannot reach your doctor or nurse.  
**How To Reduce the Risk:** Follow care instructions at all times to keep the catheter clean and dry. Remember to wash your hands before beginning any procedure. Wear a mask if you have a cold, the flu, or a similar type of illness. Avoid persons who are ill. Avoid contact with animals.  
**Note:** About two weeks after the catheter has been inserted, some patients will have redness at the exit site that lasts for 24-48 hours. This can be a normal part of the healing process. The redness of normal healing is NOT accompanied by pain, and goes away in 24-48 hours.

**Problem:** Swelling of Neck and Arm on Side of Catheter Insertion (Central Vein Thrombosis or Blood Clot Possible)  
**Signals:** Swelling of your hand, arm, and neck on the side of the catheter insertion.  
**What To Do:** Notify your doctor or nurse immediately. Go to the Emergency Room or call 911 if you cannot reach your doctor or nurse.  
**How To Reduce the Risk:** This happens to a certain number of people and is impossible to predict. Your doctor may give you medication or may choose to remove the catheter.
Problem: Swelling of the Leg or Feet - Femoral Placement (Central Vein Thrombosis or Blood Clot Possible)

Signals: If your catheter is in the leg, you may notice swelling, numbness, tingling or have blue or cold toes.

What To Do: Notify your doctor or nurse immediately. Go to the Emergency Room or call 911 if you cannot reach your doctor or nurse.

How To Reduce the Risk: This happens to a certain number of people and is impossible to predict. Your doctor may give you medication or may choose to remove the catheter.

Problem: Swelling at Exit Site

Signals: Shortly after your catheter is inserted, a lump appears at the exit site which may indicate bleeding. The lump grows in size.

What To Do: Apply gentle pressure over the dressing for a few minutes, and call your doctor or nurse immediately. If the swelling continues, call 911.

How To Reduce the Risk: Follow instructions of your doctor or nurse about physical activity immediately after insertion.
**Problem:** Break or Accidental Cut in the Catheter  
**Signals:** Leaking of fluid or blood.  
**What To Do:** Immediately clamp the catheter between the break and the skin exit site. If this is not possible, then apply tape securely to the leaking area. Call your doctor or call 911. The catheter will need to be repaired.  
**How To Reduce the Risk:** Rotate the spot where you clamp. Keep scissors away from the catheter.

**Problem:** Air in the Lung Space (Pneumothorax)  
**Signals:** You will notice any one or more of the following: chest pains, cough, throat irritation, shortness of breath.  
**What To Do:** Call 911.  
**How To Reduce the Risk:** Follow your doctor’s instructions about physical activity, especially right after your catheter is inserted. Do not remove end caps or open the clamp on the catheter.
**Problem:** Air in the Catheter (Air Embolism)

**Signals:** Shortness of breath or chest pain.

**What To Do:** Call 911. Immediately clamp the catheter near the exit site if you think the catheter has been damaged.

**How To Reduce the Risk:** Never take the end cap off without first clamping the catheter. Keep an extra clamp available at all times. Take care not to damage or break the catheter.

**Note:** In an emergency, you may bend the catheter on itself and secure it with a rubber band or tape. This is a temporary fix and a catheter clamp should be obtained as soon as possible.
Frequently Asked Questions

How will I know if everything is okay?
Your catheter should stay safely in place and remain covered with dressing. About two weeks after the catheter has been inserted, some patients notice an increased redness around the exit site for 24-48 hours. This is a normal part of the healing process.

However, if you notice redness around the exit site that is painful to touch, or if there is any drainage around the catheter, you should contact your doctor or nurse as this is a sign of infection.

A low grade temperature between 98.8°F (37.1°C) and 100°F (37.78°C) and not feeling well for more than 24 hours may also be a sign of infection. If you have a temperature higher than 100°F (37.78°C), call your doctor or nurse immediately.

Can I shower, bathe, or swim?
You must not get the catheter, exit site, or dressing wet since it may cause infection. Although you should not shower or swim, your doctor may allow you to bathe as long as you use a waterproof dressing. Follow your doctor’s instructions to properly care for your exit site after you bathe.
**Does the exit site always need a dressing?**
Generally your doctor will recommend that you keep some type of dressing on the exit site at all times to prevent infection. Keep an extra dressing kit at home in case you need to change your dressing between treatments or take it with you when you travel. Ask your dialysis care team to teach you how to change dressings in an emergency.

**What happens if the catheter gets damaged?**
The catheter can often be repaired using special equipment at your dialysis treatment center. Clamp the catheter and contact your doctor or nurse. Call 911 if you can’t reach your doctor or nurse.

**What should I do if the catheter comes out?**
Since the catheter is anchored under your skin, it is unlikely that it will come out unless it is pulled on. If you think the catheter is slipping or accidentally gets pulled out, apply direct pressure immediately over the exit site and call your doctor or nurse immediately. Call 911 if you can’t reach your doctor or nurse.

**Should I wear a medical alert type bracelet?**
It is a good idea to wear something that tells others that you have a dialysis catheter. A bracelet or necklace could provide lifesaving information to emergency workers if you became ill or were in an accident. There are several companies who sell medical alert jewelry.
Should someone else know how to care for my catheter?
It is a good idea for a friend or family member to know how to care for your catheter and know any specific instructions from your doctor or nurse. They can help take care of your catheter if there is a problem.

How long can the catheter stay in place?
Your doctor is the best source for this answer. The catheter is designed to stay in place for long periods of time, but each patient is unique. The better you care for your catheter, the less risk you have for complications.

Can my catheter be used for non-dialysis treatments?
Your dialysis catheter should only be used for dialysis treatments. To keep your catheter free of blood clots, your doctor or nurse will fill your catheter with a heparin solution in between treatments. Before your dialysis treatment, the heparin is removed with a syringe. If you go to the hospital, it is important to let the nurse know that your catheter is for dialysis only and that it is filled with a high concentration of heparin.

If you have any additional questions, call your doctor or nurse. Or, you may also call the Bard Clinical Information Hotline at: 800-443-3385.
Comments and/or Changes Recommended by Your Doctor or Nurse
This patient guide should be used by your health care provider during teaching and follow-up care. Your doctor or nurse is your best source of information. The patient guide is only a reference and does not replace your health care provider's complete instructions. For more information, please contact us using the information below.