

Getting Ready to Learn about a Tunneled Central Line

Learning something new can be hard. It is even harder if you are not feeling well. The purpose of this education plan is for you and the staff to review the following information together. Here are some good things to tell the staff:

* Who you want to learn with you. We would like to have someone who will be helping you at home learn with you.

*The best way for you to learn. Do you learn best by reading a book or pamphlet or by doing things yourself?

*If you are not feeling well, if you are in pain or you cannot focus on learning right now.

This information is important to your health. We may explain something more than once.

What I Need to Learn About a Tunneled Central Line

By the time I leave the hospital I will be able to tell the staff:

- What a tunneled central line is
- Why I need a tunneled central line at home
- The purpose of each part of the tunneled central line and the dressing
- How my tunneled central line should be cared for at home
- What signs to look for if there is something wrong with my tunneled central line and what to do about it
- Who will be caring for my tunneled central line at home

The staff will use three questions and answers to teach me about my tunneled central line:

- What is my main problem?
- What do I need to do?
- Why is this important to me?

The staff will ask me to repeat back important points in my own words, or ask me to show them what I have learned. They want to make sure that I know about my tunneled central line and what to do if I have problems.

What is my main problem?

- I have a tunneled central line. I need to know what a tunneled central line is, how to care for it at home, and how to watch for complications.

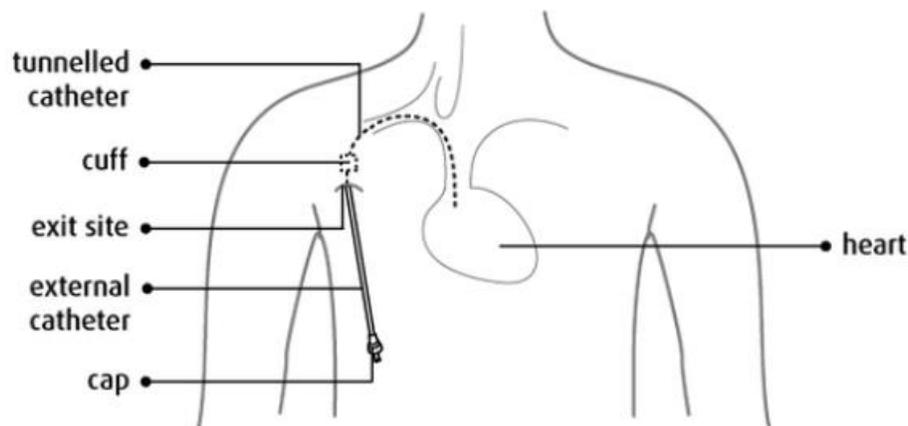
What do I need to know?

- A tunneled central line is a special tube that is inserted in my body. Some are only one tube (called lumen) and some are 2 or 3 tubes (or lumens) put together. These look like one tube inside the body and two or three tubes outside the body.
- There are different types and brands of tunneled central lines. My line may be a Hickman catheter, a PowerLine catheter or a Power Hohn catheter.
- A doctor in the operating room or a radiology doctor will put in the tunneled central line. I will be given anesthesia when this is done.
- The doctor will make 2 incisions to put in the tunneled central line. The first is a small cut near my shoulder call the *insertion* site. The doctor puts the tunneled central line in the vein at this site. This spot should heal within a week or two. The second site is below the first. This is where the line comes out of the skin. This site is called the *exit* site. The tunneled central line is under the skin between these two spots.
- Near the spot where the tunneled central line comes out of the skin is a Dacron cuff. This cuff lies under the skin. If I could see the cuff it would look like a piece of felt wrapped around the line. Skin will grow around the cuff in about 6 weeks. The cuff helps hold the

tunneled central line in place. It also keeps germs from moving up the line into the blood.

- The tunneled central line is inserted into a blood vessel (called a vein) in my upper chest. The tip is in a large vein between my shoulder and my heart.

Tunneled Central Venous Catheter



Used with permission from the Canadian Cancer Society

Why do I need a tunneled central line?

- The tunneled central line can be used to give me medicine, nutrients or fluids.
- The tunneled central line can be used to draw my blood. I won't have to have as many needle 'pokes' if I have a tunneled central line.
- The tunneled central line can last a long time (from weeks to years).

The purpose of each part of the tunneled central line and the dressing:

- **Dressings:** A clean, dry dressing must always cover the area where the tunneled central line goes into the skin. This helps to prevent infection.
- **Caps:** The caps prevent air and germs from entering the line. Fluids, medicine and nutrients can be given through the cap. There should always be a cap on the end of each lumen.

- **Clamps:** Near the end of the line is a small clamp. This clamp may be used to stop fluid or air from getting inside the line. When not using the line I may keep it clamped or unclamped.

How my tunneled central line should be cared for at home

General Care:

- Anyone working with my tunneled central line should wash his or her hands with soap and water or use a hand sanitizer.
- Clean the end of the line with an antiseptic swab (for 30 seconds) before putting anything into the line.
- The area where I store my supplies and care for my line should be free from dirt and dust.
- I should not take a shower until my doctor tells me that I can. When I shower, I should cover the dressing with plastic so it doesn't get wet.

Dressings:

- A clean, dry dressing must always cover the area where the line enters my skin.
- The dressing should be changed at least one time a week or as directed by my doctor or home health nurse. At first the dressing will be changed by my nurse but later I, or someone else, may be taught how to change the dressing.
- The dressing should be changed if it becomes loose, dirty or wet.
- When the dressing is off, the skin around the tunneled central line should not be touched with bare hands.

Keeping the tunneled central line open:

- The inside of the tunneled central line has to be kept "open" so that the medicines or fluids can flow into the vein.
- The tunneled central line is kept open by filling it (called flushing) with saline or a medicine called heparin when the line is not being used.
- My nurse will do this in the beginning. Later the nurse may teach me, or someone who can help me, to flush my line.

Changing the caps:

- The caps at the end of the tunneled central line should be changed once a week or any time they are removed.
- My nurse will change the caps at first. Later the nurse may teach me, or someone who can help me, to change the caps.

I will be able to tell the staff what I need to look for if there is something wrong with my tunneled central line and what to do about it.

Bleeding

- I may see blood under the dressing in the area where the tunneled central line enters the skin. It is normal to have a small amount of bleeding right after the tunneled central line is put in.
- Another sign of bleeding may be swelling or bruising and pain where the tunneled central line comes out of the skin.
- I should watch for bleeding bigger than the size of a quarter after the first dressing change.
- If I notice bleeding larger than the size of a quarter I should push firmly with my fingertips at the spot where the tunneled central line comes out of the skin. I should hold this for 15 minutes. If this does not stop the bleeding I should call my home health nurse or my doctor.
- I should watch for swelling, bruising or pain at the spot where the line comes out of my skin.
- I should call my nurse or doctor if I notice swelling, new bruising, or pain.
- To prevent bleeding I should:
 - Avoid activities that will stress my arm or chest, such as vacuuming, mowing the lawn, playing basketball.
 - Not lift objects that weigh more than 10 pounds.
 - Not pull at the tunneled central line. I can also tape it to my skin to keep it from getting pulled.
- After I have had my tunneled central line for a while I may not have as many limits to my activity. I should discuss this with my doctor.

Tunneled Central Line Movement

- The tunneled central line could slide out of my skin. I don't want it to slide out because the end of the tunneled central line will be in the wrong place.

- I should watch to see if it looks like the tunneled central line has slid out of my skin. If it has, I may be able to see the Dacron cuff showing.
- To keep my tunneled central line from moving, I should make sure nothing tugs on the line and keep it secured with tape.
- If I think the line has slid out, I should not try to push it back in. This can cause infection. I should call my nurse or doctor.

Infection

- Infection is when germs get into either the blood or into the area where the tunneled central line goes into the skin.
- Signs of infection that I may notice are redness, swelling, or drainage. If germs get into my blood, I could also have chills and fever or feel achy and tired.
- Ways I can help prevent infection:
 - Always wash my hands before doing anything with my tunneled central line.
 - Change the caps at the right time.
 - Make sure that the caps are not loose so that they won't fall off.
 - Change the dressing once a week or if it gets wet or is loose.
 - Always clean the end of the line with an antiseptic swab (for 30 seconds) before putting anything into the line.
 - Do not touch the skin around my line when the dressing is off.
 - Never try to push the line back into the skin.
- I will call my nurse or doctor if I notice any signs of infection.

Clogged Tunneled Central Line

- A blood clot or a clump of the medicine that is running into the line can cause it to clog.
- If the tunneled central line is clogged it may be hard to flush or my medicine may go in very slowly.
- I should never push hard when I am flushing my tunneled central line. This could make a part of the clog to go into my body or cause the line to break.
- If I think my line is clogged I should call my nurse or doctor.
- Sometimes a special medicine can be put into my line that will open it up.

Blood Clot

- Sometimes a blood clot can block the flow of blood in the vein.
- A blood clot can cause pain or swelling in my hand, arm, shoulder, chest or back.
- I should call my nurse or doctor if I see any signs of a blood clot.

Tears or Breaks in the Tunneled Central Line

- Some tunneled central lines may be soft and stretchy. Stretching the line or pushing too hard to get fluid in can cause tears or breaks in the line.
- If there is a tear or break, I may see fluid leaking from the tubing where the tear or break is.
- If I notice a tear or break, I should fold the tunneled central line over on itself and tape it down. I should make sure the fold is between the break and my skin. Or, if possible, I should clamp the line between the break and my skin.
- I should also wrap the fold in an antiseptic pad then wrap it in gauze.
- I should call my nurse or doctor right away if this happens.
- To prevent tears and breaks I can tape the line to my skin to keep it from getting pulled on.
- I should never push hard to flush the line.
- I should never use scissors near the line.

Air in the bloodstream

- Air can get into the bloodstream if the tunneled central line is broken or if the caps are loose or missing. This is a very rare, but serious problem.
- I should watch for sudden shortness of breath, dizziness, chest pain or cough.
- If this happens I should quickly fold the tubing over on itself so that no more air can enter. Or, if possible, I should clamp the line between the break and my skin. I should then lie down on my left side with my hips higher than my shoulders. I should call or have someone call 911.

The people who will be helping me care for my tunneled central line may be:

- A home health nurse
- My primary care doctor
- A family member or someone who cares for me
- Infusion center staff

Why is this important to me?

- To prevent complications
- To know what to do if a complication happens

If I have any questions or problems, I may call:

_____ Home-care agency: _____

_____ Doctor: _____

_____ Infusion Center: _____

_____ Vascular Access Specialist Team (VAST)
Call the hospital operator at 269-341-7654 and ask to have the
VAST nurse paged. The VAST nurse will return your call.

Post this page in an easy to find place like your refrigerator.

Tunneled Central Line (Central Venous Catheter) Education Plan

Resources for Staff

- Tunneled Central Line (Central Venous Catheter) Education Plan
- INS (Intravenous Nurse Society) Manual

Teaching Tools

- Tunneled Central Line (Central Venous Catheter) Education Plan

References

- INS (Intravenous Nurse Society) Manual

Approved by: Patient Education Council

Authored by: Wendy Douglas RN, VAST

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* This page is intended for staff use only. Do not give to the patient. This document is not a part of the permanent medical record.