Some facts about central venous catheters (hemodialysis catheters)

Introduction
In order to have regular hemodialysis treatments, nurses need to have access to your bloodstream. To form this access, a surgical or other specialized procedure will be needed.

The three most common types of access are:
- Internal arterio-venous fistula (AV fistula)
- Internal arterio-venous graft (AV graft)
- Central venous catheter (also called central venous “line” or hemodialysis catheter)

The central venous catheter
The central venous catheter is a flexible synthetic (man-made) tube that is usually placed in a large vein in your chest. Sometimes these catheters are placed in a vein in the neck, groin or back. Each central venous catheter has two openings called "ports" or "limbs". One port takes blood from your body to be cleaned by the dialysis machine and the clean blood returns to your body through the other port. The spot where the catheter goes into the skin is called the "exit site".

A central venous catheter can be used while you are waiting for surgery for your AV fistula or graft. It is also an option if an AV fistula or graft cannot be made.
Central venous catheters are put in place by a nephrologist, surgeon or a radiologist in the x-ray department or the operating room.
A central venous catheter can be used immediately once it is placed in your vein. There is an increased risk of infection with central venous catheters at both the area where the catheter goes into the body, and within the bloodstream. Also, there may be damage to the vein where the catheter is placed.
**Placement procedure**

The central venous catheter is put in using ultrasound to help with correct placement. A local anesthetic (freezing) is used.

The catheter is held in the right place by a stitch on the skin. If your central venous catheter is going to be used permanently (because an AV fistula or graft cannot be made), the stitch may be removed once the catheter is firmly in place.

**Important information about your central venous catheter**

*After central venous catheter placement:*

- Keep the dressing in place and dry at all times.
- Do not take a shower or soak the area in a bathtub; your nephrology team will give you some bathing suggestions.
- Do not swim.
- Report any fevers, chills or pain on your skin at the exit site to your nephrology team.

Your nephrology team will give you any other instructions.

*On an ongoing basis you should:*

- Never remove the caps on the end of the central venous catheter openings.
- Avoid pulling on your catheter.
- Always wear a mask whenever the dressing is being changed and when the caps are being removed or replaced.

*Tell your nephrology team right away if any of the following occur:*

- Fevers, chills, sweats or tenderness on your skin at the exit site
- New arm or facial swelling
- Bleeding that occurs from your catheter or the surrounding area when you are not in the dialysis unit

*At each hemodialysis treatment:*

- Make sure the nurses can see your central venous catheter at all times during your hemodialysis treatment.
- Wear a mask whenever the caps are removed from the ends of the catheter openings.

*Other key things to remember:*

- Sometimes central venous catheters can become blocked and will need medication to unblock them.
- Make sure the dressing stays dry and in place unless it is being changed by a nurse.
- Take special care to keep the dressing dry when washing.
Generally, you should only let the specially trained nephrology staff do anything with your catheter. In an emergency, other healthcare staff may need to use the catheter to get blood samples or to give you medication.

*It is important that these healthcare staff be made aware that there is a blood thinner in your catheter that needs to be removed before anything else is done.*

For further information, or if you wish to help us in our efforts, please contact The Kidney Foundation of Canada office in your area. You can also visit our Web site at [www.kidney.ca](http://www.kidney.ca).

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