

Haemodialysis Vascular Access - Central Venous Catheter

What is a Central Venous Catheter (CVC)?

- A CVC is a plastic tube or catheter with two channels. The CVC may be placed in several locations but is commonly placed in the internal jugular vein (in your neck). The catheter is tunnelled under your skin with an exit point on the upper chest usually on the right side. The CVC is used as a bridge access for dialysis.

What is meant by a “bridge” access?

- The CVC is viewed as a “bridge” access for clients who need urgent dialysis treatment and they have not yet had a functioning permanent vascular access.

How will it be inserted?

- The CVC will be inserted in the Diagnostic Imaging department. The site selected for insertion will be cleansed with an antiseptic solution. A freezing agent will be injected into the area where the CVC is to be inserted. After the procedure, there will be several sutures in place: some at the neck and the other two on the chest to hold the CVC in place. A Chest X-Ray is taken after insertion to check the position of the CVC.

How will the CVC be used?

- The catheter contains two ports, one to draw blood from the body for toxin removal and the other to return the cleaned blood back to the body. The ports are connected to the dialysis machine bloodlines.

What is the potential problem?

- The catheter may become blocked by blood clots.

- The central vein may be blocked or develop narrowing from scar tissue.
- You may need to have the line changed frequently.
- Infection can occur at the exit site or in your blood stream.

How do I take care of my CVC?

Immediately Post procedure:

- Some bleeding and discomfort is common after the procedure. If bleeding continues apply direct pressure with clean gauze and notify your haemodialysis nurse or go to your emergency department.
- Acetaminophen or analgesia ordered by your physician may be taken for pain control.
- It is important that you keep the catheter dressing dry.

Maintenance Care:

- The nursing staff will remove the neck sutures in 10-14 days.
- Showering is permitted. Speak to your dialysis nurse about showering techniques.
- If possible keep the catheter taped to skin to prevent pulling.
- The catheter clamps must remain closed at all times other than during dialysis. Check catheter clamps are closed at least twice daily.
- Observe catheter exit site (use a mirror if unable to visualize) for signs of redness, swelling or infection. If present notify your nurse or go to your emergency department.
- It is unusual for a CVC to come out. If it does, apply firm pressure to the exit site and go to your emergency department.

- Your dialysis nurse will check the catheter each dialysis prior to use.
- The hubs are cleansed and the line is checked for patency. Blood thinner used to keep the lines patent between treatments is removed prior to commencing treatment.
- At the end of dialysis the catheter hubs will be cleaned, blood thinner instilled to keep the CVC clear between treatment and sterile caps applied to the catheter ends. Fresh sterile caps will be applied to the CVC ends.

How long will I keep my CVC?

- Your Nephrologist will refer you to see a vascular surgeon for a fistula creation.
- When your fistula is mature and ready for use, the CVC can be removed. This may take 3 to 4 months or longer.
- The CVC will be removed in the Diagnostic Imaging department, the same area where the CVC was inserted.

What do I do after the CVC is removed?

- You will have a small suture at the exit site on your chest. A bandage will cover the area.
- The suture can be removed in few days. Please ask your dialysis nurse to check the site when you go for your treatment.
- If there is any bleeding from the site, please apply pressure for 10 minutes and if this does not help, please go to the nearest emergency department.