Central Line (Central Venous Access Device)

You need a central line as part of your treatment. It’s also called a central venous access device (CVAD). A small, soft tube called a catheter is put in a vein that leads to your heart. When you no longer need the central line, it will be taken out. Your skin will then heal. This sheet describes types of central lines. It also explains how the central line is placed in your body.

What a Central Line Does

A central line is often used instead of a standard IV (intravenous) line when you need treatment for longer than a week or so. The line can deliver medications or nutrition directly into your bloodstream. It can also be used to measure blood flow (hemodynamic monitoring), to draw blood, or for other reasons. Ask your doctor or nurse why you need the central line and which type you’ll get.

Types of Central Lines

The central line will be placed into one of the veins as described below. Which vein is used depends on your needs and overall health. The catheter is threaded through the vein until the tip sits in the large vein near the heart (vena cava). Types of central lines include:

- **Subclavian line**: This line is placed into the vein that runs behind the collarbone.
- **Internal jugular line**: This line is placed into a large vein in the neck.
- **Femoral line**: This line is placed in a large vein in the groin.
- **Port-a-Cath**: They can be left in place for weeks or months.

Placing the Central Line

- You’re fully covered with a large sterile sheet. Only the spot where the line will be placed is exposed. The skin is cleaned with antiseptic solution. These steps lower the risk for infection.
- Medication (local anesthetic) is injected near the vein. This numbs the skin so you don’t feel pain during the procedure.
• After the pain medication takes effect, the catheter is gently passed into the vein. It’s moved forward until the tip of the catheter is in the vena cava, close to the heart.
• The other end of the catheter extends a few inches out from your skin. It may be loosely attached to the skin with stitches, to hold it in place.
• The doctor flushes the catheter with saline solution to clear it. The solution may include heparin, which prevents blood clots.
• An X-ray or other imaging test is done. This allows the doctor to confirm the catheter’s position and check for problems.