

TECHNIQUE

Caring for Clients with a Central Venous Access Device (CVAD)

Central venous access devices allow fluid administration directly into the superior vena cava. They are used in the following circumstances:

- When large volumes of fluid are required
- When highly irritating medications are administered
- When peripheral sites are inadequate or unavailable
- When frequent blood draws are required
- When central venous pressure is monitored

CVADs require sterile occlusive dressings. To reduce the incidence of catheter-related blood stream infections you must follow scrupulous sterile technique when changing the dressing and administering fluids through the CVAD. Many facilities have customized central line dressing trays available for your use. Be sure to familiarize yourself with your facility's equipment and protocols.

- Position the patient supine with his head turned away from the CVAD site.
- Wash your hands, apply a mask, and don clean procedure gloves.
- Carefully loosen the old dressing, being sure not to tug on the CVAD line when removing it. Discard the dressing and your gloves in a biohazard receptacle.
- With the dressing off, inspect the site. If you see erythema, leakage of fluid from the site, or purulent drainage immediately report it to the physician.

- Apply sterile gloves, and cleanse the site with a sterile 2% chlorhexidine swab; the preferred skin antiseptic. Historically, Betadine was used to cleanse the skin. You may still find facilities using this method. However, the CDC recommends chlorhexidine as the preferred agent.
- Perform a back-and-forth scrubbing motion for 30 seconds over a 2-inch square area.
- Allow the site to air dry for at least 30 seconds.
- If a tubing change is necessary, ask the patient to hold his breath or bear down as you change the tubing. This increases intrathoracic pressure and prevents air from entering the line.
- You are now ready to apply the dressing. Many facilities recommend application of an antimicrobial impregnated patch over the insertion site, which is then covered by a transparent film dressing. This type of dressing reduces catheter-related blood stream infections as well as local infections while providing an occlusive barrier. If the site is oozing blood, a sterile gauze dressing may be applied over the insertion site before the antimicrobial patch and film dressing are applied.
- Once the film dressing is on, loop and secure the tubing to the dressing to prevent tugging.
- Label the dressing with the date, time, and your initials.