14 Central Venous Access Device

Patient name: ______________________ **Admission:** ______________

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I. The client/caregiver can describe a tunneled central venous catheter.

A. These devices can be used to administer
   1. Various IV fluids
   2. Medications
   3. Blood products
   4. Nutritional solutions

B. They can also provide means for hemodynamic monitoring and taking blood samples.

C. They are usually introduced into the subclavian or internal jugular vein and ending in the superior vena cava.

D. All central venous access devices (CVADs) require radiographic confirmation of position before therapy is begun.

E. Types of CVADs include the following:
   1. Peripherally inserted central catheters (PICCs). Check additional information.
   2. Nontunneled percutaneous central venous catheters
   3. Tunneled central venous catheters. Check additional information.
   4. Implanted ports. Check additional information.

II. The client/caregiver can list advantages of this type of catheter.

A. Allows monitoring of central venous pressure.

B. Permits aspiration of blood samples.

C. It allows administration of large amounts of IV fluids in case of an emergency.

D. It reduces the number of venipunctures needed to maintain access.

E. It can handle the volume of fluids when the solutions need to be diluted as in chemotherapy or total parenteral nutrition solutions.

III. The client/caregiver can list possible risks or complications of using CVADs.

A. Pneumothorax

B. Sepsis

C. Thrombus (clot) formation

D. Vessel and/or adjacent organ perforation

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IV. The client/caregiver can demonstrate proper procedure for dressing change.

A. Wash hands thoroughly before procedure. Use mask for self and client per policy. If client is not using mask, have him or her turn head away from site.

B. Put on clean gloves. Carefully remove old dressing and dispose into disposal bag. Leave in place the tape that anchors catheter in place. Remove gloves and wash hands again.

C. Open package, and create sterile field.

D. Put on sterile gloves.

E. Carefully remove tape and support catheter with one hand while cleaning.

F. Cleanse area with an alcohol swab by beginning at the exit site and cleansing in a circular motion going out away from the catheter approximately 2 inches, never returning to the exit site with the same applicator. Allow skin to dry.

G. Use povidone-iodine solution to cleanse using same technique. Allow skin to dry.

H. Make a loop in the tubing and secure to prevent tension or tugging at insertion site. Apply an occlusive dressing as instructed. Make note of dressing date and time of change.

I. Dispose of soiled dressings, remove gloves, and wash hands.

V. The client/caregiver can demonstrate the procedure of catheter cap change.

A. Assemble equipment.

B. Wash hands.

C. Open package, keeping it sterile. Put on clean gloves.

D. Clamp catheter.

E. Stabilize hub, and remove old cap.

F. Cleanse the connection area of cap and catheter with alcohol.

(Continued)

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G. Screw on the new cap.
H. Change catheter caps one to two times per week or as ordered by physician.

VI. The client/caregiver can list general measures for catheter.

A. Sharps and any equipment contaminated by blood are disposed of in puncture-resistant containers with lids.
B. Stress the importance of good hand hygiene and aseptic technique.
C. Keep catheter clamped as ordered.
D. Daily inspect skin for any signs of infection such as redness, drainage, swelling, or tenderness, and report to nurse.
E. Use transparent or sterile gauze dressing to cover catheter site.
F. Clean injection ports with approved antiseptic agents before accessing system.

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G. Keep emergency numbers next to telephone.
H. Wear Medic Alert identification.

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