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PICC and MIDLINE CATHETER REMOVAL

Section: Nursing
Compliance: ACHC Infusion Pharmacy
INS Standards: 8, 10, 11, 16, 17, 18, 21, 45
ACHC STANDARDS: DRX2-10D, DRX5-1D, DRX5-5E, DRX7-21A
TJC STANDARDS: IC.02.01.01, NPSG.01.01.01, PC.02.01.01, PC.02.01.03, PC.02.02.05, PC.02.03.01
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I. POLICY

Peripherally Inserted Central Catheters (PICC) and Midline catheters are removed when clinically indicated due to unresolved complications, completion of IV therapy, confirmed evidence of Catheter Associated Blood Stream Infection (CABSI,) the tip location is no longer appropriate for prescribed therapy, or the catheter is no longer indicated for Plan of Care (POC). Do not remove PICC line solely based on length of dwell time as there is no recommended dwell time. RNs trained in PICC line and midline removal may perform PICC and midline removals. LPNs must refer to their State Board of Nursing Scope of Practice. **Centrally placed tunneled and non-tunneled central vascular access devices (CVADS) are to be removed in a controlled setting, not in the patient home.**

II. PROCEDURES

A. Removal of PICC or Midline Catheter

1. Supplies needed:

   a. Non-sterile tape measure
   b. Non-sterile gloves (need sterile gloves only if culturing catheter tip)
   c. Sterile gauze
   d. Occlusive dressing
   e. Sterile scissors and sterile container (needed if culturing catheter tip)

2. Prior to procedure:

   a. Assess if the patient is on anticoagulation therapy or at risk for prolonged bleeding as this will increase the length for homeostasis to occur.
   b. Teach the patient the Valsalva Maneuver to be performed during catheter removal to prevent air embolism.
   c. Explain procedure to patient/caregiver.

3. Review order for removal or standard protocol.

4. Identify patient using 2 identifiers.

5. Perform hand hygiene (refer to CarepathRx *Hand Hygiene* policy). Don gloves.

6. Gather supplies onto a clean, disinfected, aseptic field.

7. Inspect insertion site and general condition of cannulated arm and shoulder. Measure circumference of upper arm, midway between the elbow and shoulder and document this measurement. Document any pain, redness, edema, or drainage. Report any problems to physician.

8. Place the patient in the Trendelenburg or supine position unless contraindicated, so that the catheter insertion site is below the level of the patient's heart.

9. Remove dressing and securement device.

10. Instruct patient to perform Valsalva Maneuver during catheter removal.

11. Hold sterile 2x2 gauze directly to insertion site with non-dominant hand. With dominant hand, slowly remove the catheter using gentle even pressure.

12. Stop if resistance is met.

    a. Redress catheter insertion site with a sterile dressing and apply warm compresses above the insertion site and limb elevation.
    b. Reattempt removal after 15 to 30 minutes.
    c. If still unable to remove, notify prescriber.

13. If physician has ordered catheter tip to be cultured, follow catheter removal procedure except when removing catheter avoid contact with skin and place tip on a sterile area ensuring tip does not become contaminated. Uncap sterile specimen cup. Using sterile scissors, trim 5 cm from distal tip of catheter and place in cup. Label specimen cup appropriately.

14. After removal of catheter, apply manual pressure to site with sterile 2x2 gauze until homeostasis is achieved.

15. Apply occlusive dressing to catheter exit site. Leave dressing in place for at least 24 hours. Change the dressing every 24 hours until the exit site has healed.

16. Examine removed catheter for length and compare to length documented at insertion, as well as integrity of the tip (not jagged and tip intact).

    a. If a catheter breakage occurs, call the physician immediately. Arrange to have patient transported to an emergency room and follow any orders received from the physician.

17. Remove gloves and discard; perform hand hygiene.

18. Dispose of used supplies in appropriate container.

19. Instruct the patient to remain lying flat for 30 minutes after removal of the catheter.

20. Monitor patient for 30 minutes after removal.

21. Instruct the patient to watch for:

    a. active bleeding at exit site that will not stop with pressure
    b. extensive bruising near exit site
    c. swelling of extremity
    d. Fever (temp>100.6F)
    e. Redness and /or tenderness
    f. **If these symptoms appear, instruct patient on how to contact the appropriate personnel during business hours, the availability of an answering system to receive calls during evenings, nights, weekends, and holidays.**

22. Documentation and Assessment should include:

    a. Date and time of catheter removal.
    b. Reason for removal.
    c. Measured length of catheter after removal and integrity of catheter tip.
    d. Any complications such as phlebitis, redness, swelling or pain, upper arm/neck swelling, excessive or prolonged bleeding or any problems noted with removal of catheter.
    e. If catheter tip cultured, document culture of catheter tip obtained.
    f. Upper arm circumference between elbow and shoulder.
    g. Educate patient how to contact the appropriate personnel during business hours, the availability of an answering system to receive calls during evenings, nights, weekends, and holidays.
    h. Patient education and receipt of education (written and verbal).

REFERENCES

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