# **URINARY CATHETER: INDWELLING (FOLEY) CATHETER CARE**

### SUMMARY

This skill describes the necessary steps to keep an indwelling (Foley) urinary catheter site as clean as possible to reduce the risk of infection

#### **ALERT**

Remember to route tubes and catheters having different purposes in different, standardized directions (e.g., IV lines routed toward the head; enteric lines toward the feet). There is a significant risk for a catheter-associated urinary tract infection (CAUTI) after the insertion of an indwelling catheter.

#### **OVERVIEW**

An indwelling catheter (also referred to as a Foley catheter) is inserted via the urethra using a sterile, preassembled, closed drainage system that acts as a reservoir for urine drained from the bladder. An indwelling catheter has a separate lumen used to inflate a balloon so that the catheter remains in the bladder for short- or long-term use. Indications for an indwelling catheter include:

- Obtaining accurate measurements of urine output in critically ill patients
- Increasing comfort in terminally or severely ill patients who are incontinent
- Managing any skin damage caused by incontinence when all other methods of managing urinary incontinence have failed
- Managing voiding difficulties in patients with neurologic disorders
- Providing immediate treatment of acute urine retention or bladder outlet obstruction
- Helping heal perineal or sacral open pressure injuries that are not healing because of continual incontinence

Bacterial growth is common where ethe urinary catheter enters the urethral meatus in both male and female patients. The duration of catheterization correlates with the risk of infection; the longer a catheter is in place, the higher the incidence of CAUTIs. Catheter care should be performed at least daily and as needed as part of routine perineal care, after bowel incontinence, or if secretions build up around the urinary meatus. If there are signs of leakage, odor, or sediment buildup, the entire catheter system should be changed to keep the system intact.

# **EQUIPMENT**

Ensure that all necessary supplies and durable medical equipment are available before the home visit

- Gloves
- Soap, washcloth, towel
- Prepackaged, organization approved wipes
- Waterproof pad
- Bath basin with warm water
- Collection bags
- Anchoring device
- Sheet

# **PROCEDURE**

- 1. Perform hand hygiene
- 2. Introduce yourself to the patient
- 3. Verify the correct patient using two identifiers
- 4. Explain the procedure to the patient and ensure that he or she agrees to treatment
- 5. Verify the practitioner's order and assess the patient for pain
- 6. Assess both the patient and primary caregivers' ability and willingness to participate in routine catheter care
- 7. Assess the patient's and caregiver's knowledge of catheter care
- 8. Provide privacy for the patient, if needed
- 9. Prepare an area in a clean, convenient location and assemble the necessary supplies
- 10. Offer the patient an opportunity to perform self-hygiene care
- 11. If the patient has an electric bed, raise it to an appropriate working height. Facing the patient, stand on the left side of the bed if right-handed and on the right side of the bed if left-handed. If side rails are being used, lower the side rail on the working side of the bed and raise the side rail on the opposite side

Rationale: Adjustment of the bed height promotes proper ergonomics. Use of side rails in this manner promotes patient safety

- 12. Perform hand hygiene and don gloves
- 13. Inspect urine for color, clarity, and amount

Rationale: Urine color, clarity, and amount can be indicators of a UTI

- 14. Ensure that there are no kinks or dependent loops in the catheter drainage system Rationale: Eliminating kinks and dependent loops ensures that the system is draining properly
- 15. Position and cover the patient with a sheet or towel, exposing only the perineal area.
  - a) Female: dorsal recumbent position
  - b) Male: supine position

Rationale: appropriate positioning ensures easy access to peripheral tissues

- 16. Place a waterproof pad under the patient
- 17. Remove gloves, perform hand hygiene, and don clean gloves
- 18. Carefully remove the catheter anchor device and free the tubing
- 19. Expose the urethral meatus with the nondominant hand
  - a) Female: gently retract the labia to fully expose the urethral meatus and catheter insertion site

Rationale: full retraction of the labia prevents contaminating of the meatus during cleaning

b) Male: retract the foreskin if the patient is not circumcised. Hold the penis at the shaft just below the glans

Rationale: retraction of the foreskin provides a full view of the urethral meatus

20. Assess the urethral meatus and surrounding tissues for skin breakdown, redness, inflammation, swelling, and discharge and ask the patient whether burning or discomfort is present

Rationale: this assessment determines the condition of the perineum and the frequency and type of ongoing care required

21. Provide routine perineal care with soap and water

Do not apply topical antimicrobial products as a part of routine catheter care because they are not effective in reducing meatal bacterial flora and reducing the risk of developing a UTI.

- a) Female: while maintaining the retracted labia, grasp the catheter using the thumb and index finger of the nondominant hand to stabilize it. Use a clean washcloth or prepackaged, organization-approved wipe to cleanse the perineal area and the portion of the catheter in contact with the perineum or meatus.
- b) Male: while maintaining hold of the penile shaft, grasp the catheter using the thumb and index finger of the nondominant hand to stabilize it. Use a clean washcloth or prepackaged, organization-approved wipe to cleanse the perineal area and the portion of the catheter in contact with the perineum or meatus Rationale: perineal care with soap and water is sufficient to keep the are clean
- c) Thoroughly rinse to remove all traces of soap and pat dry with a clean towel. For males, reduce or reposition the foreskin after care.

  Rationale: on rare occasions, not repositioning the foreskin can result in paraphimosis, a strangling of the penile head by the foreskin
- d) Relace the tube holder that anchors the catheter to the patient's leg Rationale: securing the drainage tube significantly reduces irritation and pain to the urethra and bladder

Avoid pulling on or placing tension on the catheter Rationale: tension can cause urethral and bladder trauma

- 22. Discard supplies, remove gloves, and perform hand hygiene
- 23. Document the procedure in the patient's record

# PATIENT AND FAMILY TEACHING

- Provide information about the indwelling catheter, including the reason for catheter placement and cleaning procedures
- Instruct the patient and caregiver that the collection bag should be below the level of the bladder at all times
- Instruct the patient and caregiver not to place the collection bag on the floor
- Instruct the patient and caregiver in fall prevention techniques
- instruct the patient and caregiver to check the tubing for loops and kinks, which can prevent drainage
- instruct the patient not to disconnect the catheter from the collection tubing and bag
- encourage questions and answer them as they arise
- instruct the patient not to pull on the urinary catheter and to secure it to his or her leg using a securement device to prevent tension and urethral damage
- instruct a patient who routinely switches from large drainage bags at night to leg bags during the day to maintain a closed catheter system
- instruct the patient and caregiver on the importance of handwashing and cleaning the connection ports with alcohol before changing the collection bag due to an increased risk of CAUTI
- instruct the patient and caregiver to perform catheter clean and free from microbes
- instruct the patient and caregiver how to perform daily care of collection bags following the manufacturer's instructions for cleansing

- instruct the patient and caregiver on the signs and symptoms of complications that require health care team or practitioner notification
  - o pain or discomfort
  - urinary urgency
  - o excessive, decreased, or no urine output
  - leaking urine
  - o blood, sediment, or stones in the urine
  - clogged catheter
  - bladder spasms
  - o catheter expulsion
  - o urine that is malodorous, cloudy, or a different color than normal
  - o signs of infection (burning sensation when urinating, fever, or chills)

#### REFERENCES

Agency for Healthcare Research and Quality (AHRQ) (2015) Centers for Disease Control and Prevention (CDC) (2018) Gould, C.V. and others (2019) Joint Commission, The (2014) Lo, E. and others (2014) Panchisin, T. (2014) Ramanathan, R., Duane, T.M. (2014)

# **ADDITIONAL READINGS**

None