PR40: Foley Catheterization

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Applicable To

- ACP with Schedule 2 endorsement
- CCP independently

Introduction

Bladder catheters are used for urinary drainage, or to collect urine for measurement.

Indications

- Management of urinary retention with or without bladder outlet obstruction
- Hourly urine output measurement in critically ill patients
- Daily urine output measurement for fluid management or diagnostic test
- Management of hematuria associated with clots
- Management of immobilized patients (e.g., stroke, pelvic fracture)
- Management of patients with neurogenic bladder
- Management of open wounds located in the sacral or perineal regions in patients who are incontinent
- Intravesical pharmacologic therapy
- Improved patient comfort for end-of-life care
- Management of patients with urinary incontinence following failure of conservative, behavioral, pharmacologic, and surgical therapy

Contraindications

- Urethral injury
- Pelvic trauma
- Blood at the meatus or gross hematuria associated with trauma

Caution:

- Urethral stricture
- Recent urinary tract surgery
- Artificial sphincter

Procedure

1. Position the patient supine.
2. In women, the lower extremities are frog-legged to maximize exposure of the periurethral region.
3. Sterile gloves are donned and the catheterization kit is inspected to ensure its contents are complete and free of defects.
4. **For silicone catheters**, checking the balloon should not be performed because the region of the balloon can become wrinkled making placement more difficult. The end of the catheter, if not preattached, can be connected to the drainage system before or after catheter placement.
5. Drapes are placed and the periurethral region cleansed. In men, the penis is grasped firmly with the nondominant hand and tension directed toward the ceiling, straightening the urethra. In women, the nondominant hand is used to spread the labia to facilitate cleansing the periurethral region and viewing the urethral meatus.
6. The gloved dominant hand is used to place the catheter into the urethral meatus and provide steady, gentle

pressure to advance the catheter. When a coudé catheter is used, the curved tip of the catheter should be oriented toward the dorsal surface of the penis. When the catheter tip approaches the external sphincter in men, resistance will be felt. It is often helpful to pause momentarily to let the sphincter relax before continuing insertion.

7. The catheter should be inserted to the flared portion of the catheter (i.e., hub). The balloon is inflated with sterile water only after the flow of urine is seen. Saline should not be used to inflate the balloon because crystal formation may obstruct the balloon channel and prevent balloon deflation.
8. Once the balloon is inflated, the catheter is withdrawn until slight resistance is felt. The urine collection system is connected, if not already done in step 4.
9. The drainage tubing is then anchored to the leg with tape to prevent traction of the catheter on the urethral meatus.

Notes

Troubleshooting

- If no urine is obtained, gentle pressure may be applied to the suprapubic region.
- If placement of the catheter is uncertain, consider the use of agitated saline and ultrasound to confirm placement.
- If a vaginal catheterization has occurred, leave the tubing in place, gather another set, and insert. This will allow better landmarking for the second attempt.
- Gentle irrigation through the end of the catheter using 10 to 20 mL sterile saline can be performed and should return the saline mixed with urine. If the saline is not returned or any resistance to catheterization was encountered, underlying pathology may be present and urologic consultation should be obtained.
- If the patient complains of pain during insertion, the catheter should be removed.
- If blood appears at the meatus or on the tip of the catheter, a urethral injury may have occurred. Abandon the procedure and get a urological consultation.

References

1. Schaeffer AJ. Placement and management of urinary bladder catheters in adults. 2021. [Link]
2. Bajaj L, Bothner J. Urine collection techniques in infants and children with suspected urinary tract infection. 2020. [Link]