Urinary Catheterization – 2022

Urinary Catheterization

- Introduction of a catheter into the urinary bladder
- Management of hospitalized patient
- Performed only when necessary
    - High rate of infection
    - Loss of bladder muscle tone
    - Risk of trauma to urethra

Shocking Statistics

- Urinary tract infections (UTIs) = most frequent healthcare acquired infection (HAI)
- Most frequent healthcare associated infection Catheter-associated urinary tract infection (CAUTI) accounts for 35% of health care–associated infection in the United States
- 15-25% of pts. receive urinary catheters during their stay
- Most important risk for developing urinary catheter associated UTI (CAUTI) = **Prolonged use of catheter.**

Indications for Urinary Catheterization

- **C**omfort
    - End-of-life/hospice
    - Open perineal or sacral wounds in incontinent client
- **H**emodynamic Monitoring
    - Strict I&Os (Measure accurate output)
    - Hemodynamically unstable client
- **O**bstruction
    - Urinary obstruction (tumor)
    - Gross hematuria/bladder irrigation
- **R**etention
    - Acute urinary retention
        - Confirmed with bladder scan
- **U**rologic
    - Urologic procedure/studies
    - Arrived with catheter (chronic issue)
    - Neurogenic bladder
    - Catheter placed by urologist
- **S**urgery
    - Monitor output in OR & briefly post-op
    - Unstable ortho/spine client.
    - Strict immobilization
    - Pelvic surgery – Gyno or colorectal
    - Epidural catheter

NOT indicated for:

- Incontinence
- Convenience of healthcare provider
- Patient Request
- Urine specimen collection (if client can void)

Urinary Catheters

- Made of latex or silicone
- Sized by the diameter of the lumen
    - French (Fr) scale

- Larger the number, bigger the catheter size (lumen size)

Urinary Catheter Balloons

- Keep catheter in bladder
  - Are sized by volume of fluid used to inflate (5ml, 10ml, etc.)
  - Sizes are indicated on the outside of package and on catheter itself
- Selecting catheter and balloon size depend on client and use of catheter (Smaller is better for infection risk)
  - 16 French (Fr) is standard
  - Take into consideration your client's size and gender

Catheter Types

- Straight (Intermittent)
  - Drains bladder then removed
  - Single lumen with small eye or opening at insertion tip
- Indwelling (Foley)– double lumen catheter
  - Remains in bladder to drain urine
  - Larger lumen drains urine
  - Smaller lumen inflates balloon to hold catheter in place within bladder
- Coude catheter- firm, curved tip
  - "Bent"
  - For use with Enlarged Prostates
- Three-way catheter
  - 3 Lumens: inflate balloon, drain urine, and instill irrigation solution into bladder
- Condom Catheter and Purewick Catheter
  - External collection devices
  - Used for incontinence or when catheter cannot be safely inserted
  - Less UTI risks

Indwelling Urinary Catheterization

- Consists of catheter, drainage tubing, and collection bag
  - Urine drains through the force of gravity
- Closed drainage system
  - Reduces risk of infection
- A closed system should never be broken anywhere along the system if at all possible!

Urinary Drainage Bags

- Vary according to facility
- Keep <u>below the level</u> of bladder!

Urinary Drainage Bag: "Leg Bag"

- Portable
- Discrete
- Good option if catheter has to stay in for extended time period

✓ *When inserting urinary catheters,* ***<u>STERILE TECHNIQUE IS MANDATORY</u>***

Daily Care of Catheters

- **Hand hygiene** & Gloves
- Maintain closed drainage system
- Unobstructed flow of urine
  - Keep bag below level of bladder
  - Tubing free of kinks & loops
    - Reflux of urine into sterile bladder can cause infection

- Collection bag/drainage tube should not be allowed to touch/lay on the floor
- Empty drainage bag at least once/shift
    - Use separate graduated cylinder for each patient
- Perform perineal/catheter care at least twice daily (q 12 hrs)
    - More often if soiled/warranted
    - Use catheter care wipes or soap & water
    - Document catheter care on EMR and apply BARD SureStep orange sticker to collection bag

Removal of Indwelling Urinary Catheters

- Removed as soon as evidence-based indication(s) no longer present
    - If " Adult Urinary Catheter Discontinuation Protocol" ordered, RN may remove catheter w/out provider order
        - Gives nursing authority to remove when no longer meets CHORUS criteria
    - If protocol not ordered, RN must obtain provider order to remove catheter
- Closely assess client after catheter removal
    - Need to void at least 180 ml w/in 6 hours of removal
    - Regularly assess client for urinary retention
    - Will need to intervene if no void
    - Document time & amount of 1st void

Removal of Indwelling Urinary Catheters

- Supplies:
    - Towel/absorbent pad
    - Empty 10 ml syringe
    - Non-sterile gloves
    - Optional: alcohol pads/gel
- Provide privacy
- Empty urine from collection bag and tubing
- Position client in supine position
- Place towel/pad under patient hips
- Remove leg strap/securement device from thigh (use alcohol wipes or handful of gel to loose adhesive, prn)
- Use 10 ml syringe to remove saline and deflate balloon **(*passively)***
- When balloon is empty, gently pull catheter from urethra
- Use towel to catch dribbles, dry & clean patient
- Dispose bag in regular trash
- Dispose syringe in **sharps**
- Remove gloves and wash hands
- Document on EMR
- Instruct client to notify RN when first void

Documentation

- Catheter Insertion
    - Date/Time of insertion
    - Size of catheter
    - Amount and description of urine in collection bag
    - How client tolerated
    - Chaperone
- Catheter Removal
    - Date/time of removal
    - Amount of urine in collection bag
    - How client tolerated
    - Chaperone

Beebe Policy: Adult Urinary Catheter Discontinuation Protocol

- Nurse must assess & document every shift for continued use of indwelling catheter
- Must meet (at least) one part of the CHORUS criteria to keep catheter
- If not met, RN may D/C catheter.
- When in doubt whether or not to D/C, consult with healthcare provider

"Empty the Foley they said,
it'll be easy they said!"