

Urinary Retention and Safe Catheter Insertion Algorithm: Adult Inpatient*

Does Patient Have Physical Symptoms of Urinary Retention?



Persistent urge to void or small volume voids



Fullness



Bladder Pain



New incontinence/Leaking

YES



Bladder Scan



> 300 mL

Catheterize Patient: request catheter order if needed



≤ 300 mL

Consider other causes and rescan in 1-2 hours.***



> 500 mL

Catheterize Patient: request catheter order if needed



≤ 500 mL

Wait 1-2 hours and reassess.****

NO



If >6 hours since last void or have order to check post-void residual**



Bladder Scan

Is Patient High Risk for Difficult Catheter Insertion?

- Recent bladder, urethra, or prostate surgery, or trauma, or prostatitis
- History of urethral stricture, false passage, or neobladder
- History of genitourinary reconstructive surgery
- Artificial urinary sphincter
- History of difficult catheter insertion by record or patient report
- Male patient over age 55, enlarged prostate or history of prostate cancer
- History of pelvic floor prolapse or bladder support surgery



Discuss with Urology

YES, Patient is high risk

NO, Patient is NOT high risk

Consider

- Having a nurse experienced in difficult catheterization catheterize the patient
- Asking patient what has worked for them in the past (e.g., type and size)
- Reviewing "10 Practical Tips for Safe Urinary Catheter Insertion" (see QR code below)
- Obtaining order for anesthetic gel for insertion
- If high-risk male, obtain 16 or 18 French Coude urethral catheter

Standard Catheter Insertion Procedure

Catheterize with Intermittent Technique (Preferred over Indwelling) Unless:

- Inadequate bladder emptying every 4 hrs,
- Repeated large bladder volumes retained (e.g., ≥500 mL every 4 hours), or
- Patient anticipated to need catheterization at home & ISC not feasible

If Failed First Attempt: Review the "10 Practical Tips for Safe Urinary Catheter Insertion" booklet (see QR code)

*Formal appropriateness criteria utilizing literature reviews and expert opinion were used to determine these evidence-based cut-offs. Local practice patterns can be used to determine cut-offs. To note: use of external catheters to treat urinary retention is inappropriate as external catheters only collect spontaneously voided urine.

**Consider checking sooner if patient getting high IV fluid volumes or receiving diuretics.

***Other common causes of these urinary symptoms include UTI, kidney stones, or urethral injury. Consider contacting provider for further evaluation.

****Evaluate patient's fluid intake and consider increasing fluids. Call provider if urine output is <35mL/hour, raising concern for oliguria from hypovolemia or acute kidney injury.

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