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10 Practical Tips

FOR SAFE Urinary Catheter Insertion

Ensuring Success
on the First Attempt



SUCCESS

Surgical Urinary Catheter Care
Enhancement Safety Study

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Conduct a Pre-Catheterization Assessment

- Assess for history of difficult catheterization in chart or patient report
- Scan the QR code for full SUCCESS Urinary Retention and Safe Catheter Insertion Algorithm



Is Patient High Risk for Difficult Catheter Insertion?

- Recent bladder, urethra, or prostate surgery
- 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

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)
- Obtaining order for anesthetic gel for insertion
- If high-risk male, obtain 16 French Coude urethral catheter

**NO, Patient is
NOT high risk**

**Standard Catheter
insertion procedure**

Optimize Set Up & Supplies

- Gather your supplies. Consider having a second, unopened, insertion tray kit available in case of contamination.



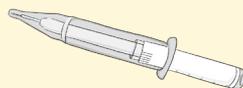
CATHETER KIT

- Review contents of kit to ensure you have everything you need. Consider obtaining or making a “difficult catheter kit” which could include these additional items:

- » Extra lubricant
- » Anesthetic gel
- » Hands-free light such as headlamp
- » Coude tip catheter



LUBRICANT



ANESTHETIC GEL



HEAD LAMP

- Consider using anesthetic gel if this is the patient’s first catheterization or if a difficult catheterization is expected
- Have an additional person available if obese female or male with hidden penis
- Use a chaperone in accordance with your facility’s policy

- Maximize lighting in room. Consider additional examination/ procedure lamp



LAMP

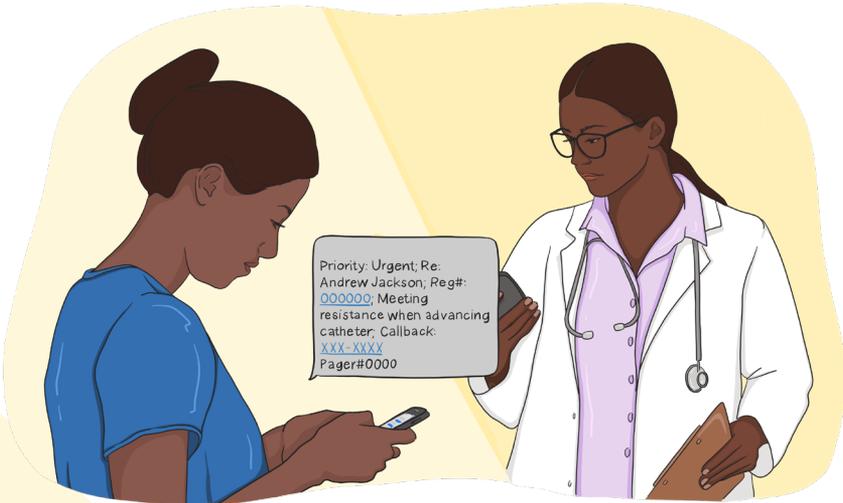


SUPPLY TABLE



TRASH CAN

- Review aseptic insertion instructions on catheter kit and follow throughout insertion process.

STOP

- Bleeding
- Severe pain or resistance in early placement penile or bulbous urethra curve. False passage stop procedure
- Pain during balloon inflation. Immediately stop inflation, as balloon of catheter may be in urethra
- Meeting resistance when inflating the balloon (pushing syringe)
- After 2 failed attempts

Prior to Insertion

- BladderSafe’s educational tools for patients and family: bladdersafe.org/resources.html
- UHN “How to Care for a Foley Catheter After Surgery:”
uhn.ca/PatientsFamilies/Health_Information/Health_Topics/Documents/How_to_Care_for_a_Foley_Catheter.pdf

During Procedure

- Walk patient through

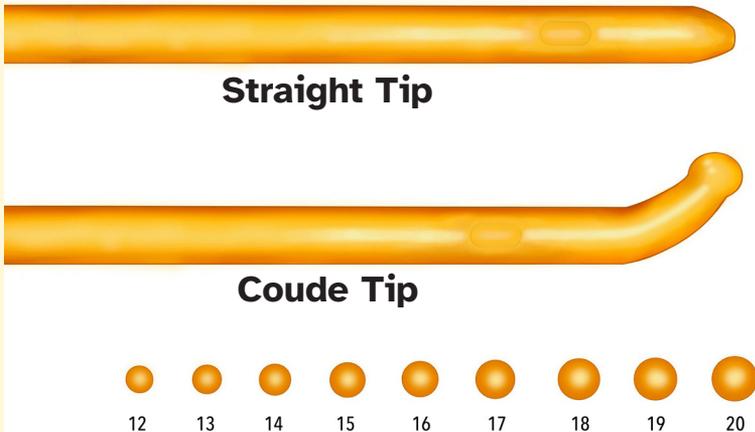


Male Genitalia

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Select the Correct Catheter Size and Type for Male Genitalia

- Baseline size - 16 Fr size
- Use Coudé (curved) tip catheter for men >55 years. Follow manufacturer's directions for direction of tip. Usually anterior presentation/12 o'clock position
- Use larger sizes (e.g., 20 Fr which are stiffer) if prostate enlargement to avoid kinking as the catheter traverses the prostatic urethra
- Flexible cystoscopy guided insertion via urology may be required for high-risk patients. See list of high-risk conditions in SUCCESS Urinary Retention and Safe Catheter Insertion algorithm



Amanda Bergman

Fig. 1 Above is an illustration of a Coudé tip catheter, which assists with the upward bend in the male urethra.

Male Genitalia

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Position Male Genitalia Appropriately

Put patient in supine position. Elongate penis in upright position (see figure 2 below) in line with normal anatomic curve without compressing urethra

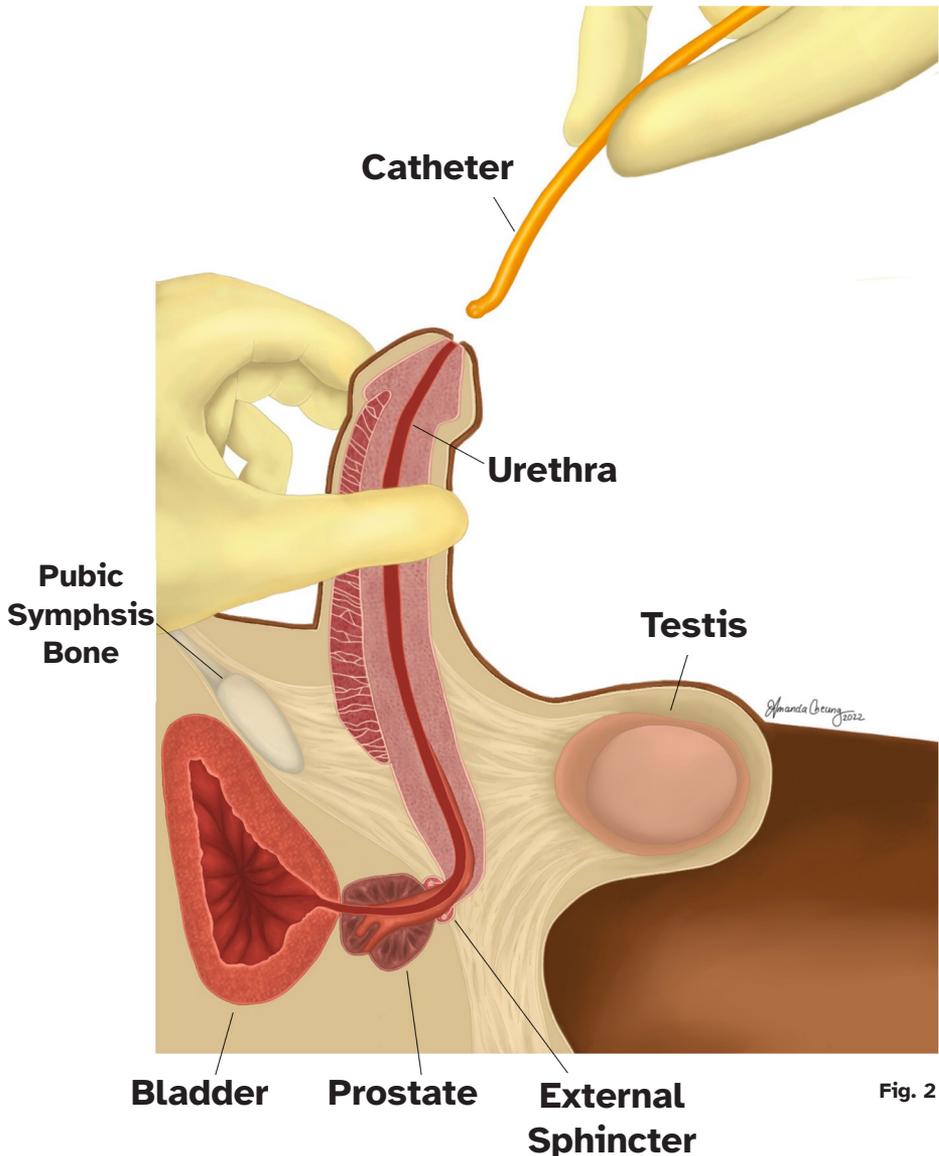


Fig. 2

Safely Insert the Catheter in Male Patient

Note: Please follow all aseptic insertion instructions per your institution's policies and manufacturer's instructions

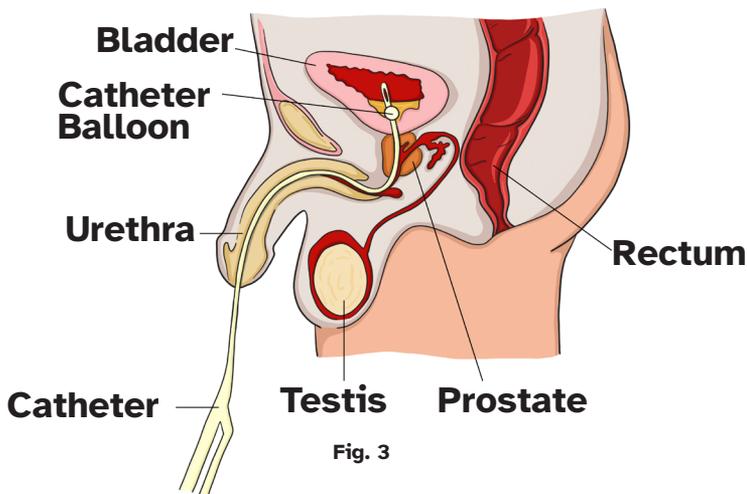


Fig. 3

- Generously lubricate catheter
- Before inserting the catheter, educate the patient on diaphragmatic breathing techniques to relax the pelvic floor and prevent external sphincter contraction. Have patient wiggle their toes or relax as if they are going to urinate to help shift their focus
- If an area of resistance is met prior to bladder entry (near the prostate) having the patient take another deep breath and advancing the catheter on the exhale can further help relax the muscles
- For Foley catheter, confirm catheter insertion to the Y hub prior to balloon inflation to prevent inflation in urethra
- Insert intermittent straight catheter 2.5 cm (1 inch or the length of a quarter) past the point when urine starts flowing
- Secure the catheter to minimize tugging of the catheter. Consider options such as a leg bag to increase patient mobility. Consider using an alternative to an indwelling catheter for patients with dementia, delirium, or intoxication as they are at risk for pulling out the catheter

Female Genitalia

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Select the Correct Catheter Size and Type for Female Genitalia

Baseline size 14 Fr Tip

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Position the Female Patient Ideally

- Recommend an additional person to hold labia open
- Consider use of a flashlight or speculum light to assist in visualization of meatus
- Make sure the patient is positioned so perineal area is easily visualized. Consider elevating the pelvic region with lifts or on a fracture bedpan placed bottom up
- If possible, frog-legged positioning may be easier in some women
- Ask the patient to cough or perform the Valsalva maneuver because this causes the urethra to bulge
- Before inserting the catheter, educate the patient on diaphragmatic breathing techniques to relax the pelvic floor and prevent external sphincter contraction
- If still unable to visualize meatus, reposition patient to right or left side and lift up leg which may help improve seeing the opening
- If no allergy to iodine or betadine, use a betadine swab to blot meatal area, watch for meatal opening wink

Female Genitalia

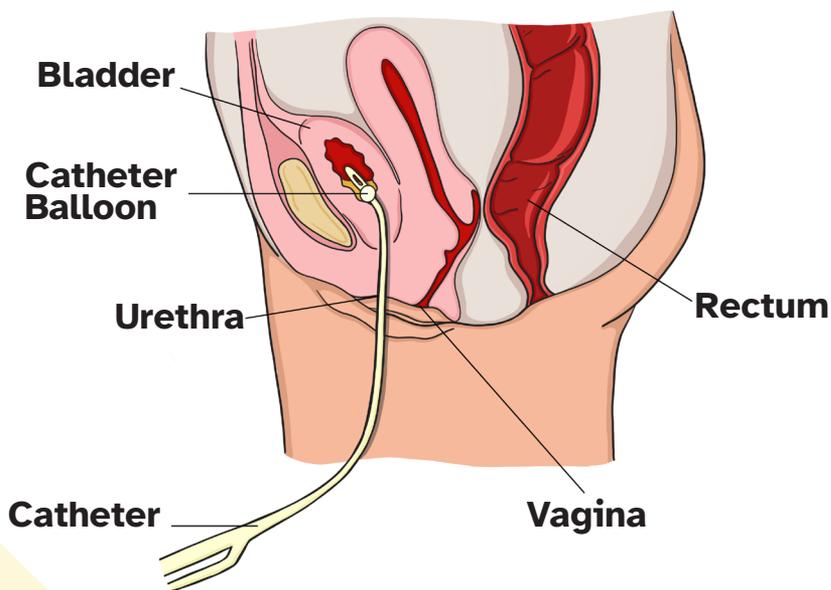


Fig. 4 This figure shows the indwelling urinary catheter location in the female anatomy.

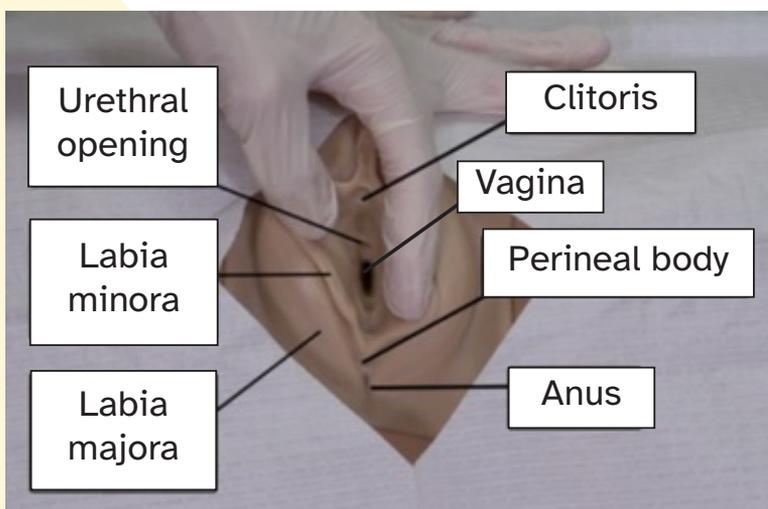


Fig. 5

It is not uncommon for people to mistakenly attempt to catheterize the clitoris or vagina. It may be helpful to ask the patient to cough or perform the Valsalva maneuver because this causes the urethra to bulge.

Safely Insert the Catheter in Female Patient

Note: Please follow all aseptic insertion instructions per your institution's policies and manufacturer's instructions

- Generously lubricate catheter
- Insert Foley catheter 6 inches/15 cm to prevent balloon inflation in urethra
- Insert intermittent straight catheter 2.5 cm (1 inch or the length of a quarter) past the point when urine starts flowing to ensure bladder doesn't collapse around the eyes (drain holes) of the catheter before the bladder is empty.
- Secure the catheter to minimize tugging of the catheter. Consider options such as a leg bag to increase patient mobility. Consider using an alternative to an indwelling catheter for patients with dementia, delirium, or intoxication as they are at risk for pulling out the catheter

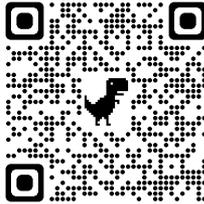
Advanced Skill Strategy

Poor meatal visualization may also occur when the urethra is deep inside the vagina. Placing a finger inside the vagina and applying gentle pressure upward will straighten the urethra. Pelvic organ prolapse at or beyond the introitus (Grade 3 or 4) may obscure the meatus. Reducing the prolapse with a clear speculum may improve meatal visualization.

References

- Society for Urologic Nurses and Associates Clinical Practice Procedure: “Urinary catheterization in adult males/females”
- Willette P, Coffield S. Current trends in the management of difficult urinary catheterizations. *J Emerg Med.* 2012;13(6):472-8. PMID: 23359117; PMCID: PMC3555603.
- Lee T, Heiko Y, Hanauer DA, Wan J. Preventing traumatic urinary catheter insertion through a computerized ordering system: quasi-experimental study from a tertiary academic center. *Hosp Pract Res. Res.* 2018;3(1):28-31. 2018;3(1):28-31.

Scan the QR code with a smart phone camera to view more SUCCESS toolkit resources.



The purpose of this guide is to share practical advice to increase the likelihood of successful insertion of an indwelling or straight catheter upon first attempt, which reduces the risk of both physical injury and infection of the urinary tract. This guide is intended to supplement, not replace, critical routine catheter insertion steps that are focused on infection prevention.



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This work was funded by the Agency for Healthcare Research and Quality (AHRQ) grant number 1R01HS026912-01A1.

For questions about this work or how to cite this work, please contact Dr. Jennifer Meddings at meddings@med.umich.edu