

Male urethral catheterization


Theory

A urinary catheter has a balloon near the tip that is inflated via a side-arm near the other end. Once inside the bladder, the inflated balloon prevents it from falling, or being pulled, out.

Equipment

- Catheter pack (containing a basin, a small bowl with cotton balls, a sterile towel, sterile gauze, and sterile gloves)
- Antiseptic solution or vial of saline
- Appropriate urological anesthetic gel
- 10 mL water-filled syringe
- Catheter bag (leg bag if situation is not acute)
- Male catheter (12F or 14F)

Procedure

- Wash your hands thoroughly. Confirm the patient's identity, explain the procedure, and obtain verbal consent.
- Unwrap all the equipment onto an instrument stand in an aseptic fashion and pour saline solution over the cotton balls.
- Position the patient supine with genitalia exposed. Raise the bed to a comfortable height.
- Wash your hands again and put on gloves. Create a hole in the center of the towel, or use a fenestrated drape, and drape over the patient so the penis can be reached through the hole.
- From here on, use your nondominant hand to hold the penis with some gauze.
- Clean the penis with the wet cotton balls, working away from the meatus. Remember to retract the foreskin and clean beneath.
- Lift penis to a vertical position, carefully position the nozzle of the lubricant gel inside the meatus, and instill the full 10 mL slowly. (If proving problematic, this can be aided by gentle milking action.)
- Position kidney bowl between patient's thighs to catch spillages later.
- The catheter will be in a plastic wrapper with a tear-away portion near the tip. Remove this portion, being careful not to touch the catheter.
- Insert the tip of the catheter into the urethral meatus and advance slowly but firmly by feeding it out of the remaining wrapper.
- On passing through the prostate, some resistance may be felt, which, if excessive, may be countered by adjusting the angle of the penis by pulling it to a horizontal position between the patient's legs.
- On entering the bladder, urine should start to drain. Advance the catheter far enough to ensure the balloon is beyond the urethra.
- Inflate the balloon with the 10 mL of water via the secondary catheter lumen.
-  Warn the patient to alert you to any pain, and watch his face.
- Remove the syringe and withdraw the catheter until resistance is felt.
- Attach draining tube and catheter bag.
- Replace the foreskin, and clean and re-dress the patient as necessary.

Hints

- You may wish to verify the presence of a full bladder with a bladder ultrasound before starting.
 - Lack of urine drainage may be caused by blockage by anesthetic gel, an empty bladder, or catheter misplacement.
 - Attempt to aspirate urine with a catheter-tipped syringe. Feel for a full bladder. If there is any doubt about position of the catheter, remove it immediately (deflating balloon first) and seek appropriate consultation.
 - Always record the residual volume—this is essential in cases of urinary retention.
 - Consider the use of prophylactic antibiotics before the procedure.
 - Complications include pain, infection, misplacement, and trauma.
 - Patients with prostate disease can often experience some mild hematuria following catheterization. Don't worry about this, but watch carefully and be sure the bleeding doesn't continue or form into clots.
- ▶ Be aware of latex allergy!

Female urethral catheterization

Theory

A urinary catheter has a balloon near the tip that is inflated via a side-arm near the other end. Once inside the bladder, the inflated balloon prevents it from falling, or being pulled, out.

Female staff will usually catheterize females.

- ! Consider antibiotic prophylaxis.

Equipment

- Catheter pack (containing a basin, a small vessel with cotton balls, a sterile towel, and sterile gauze)
- Sterile gloves
- Saline solution
- 5 mL 1% lidocaine/lubricant gel in prefilled syringe
- 10 mL water-filled syringe
- Catheter bag
- Female catheter (12F or 14F)

Procedure

- Wash your hands thoroughly. Confirm the patient's identity, explain the procedure, and obtain verbal consent.
- Unwrap all the equipment onto a cleaned (antiseptic) instrument stand in an aseptic fashion and pour saline over the cotton balls.
- Position the patient supine with knees flexed and hips abducted with the heels together. Raise the bed to a comfortable height.
- Wash your hands again and put on gloves. Lay the towel and drape it over the patient so the genitalia are exposed.
- From here on, use your nondominant hand to hold the labia apart, approaching the patient from the right-hand side, leaning over her ankles in order to reach the genitalia from below.
- Clean genitalia with the wet cotton balls (using each once only), working in a pubis–anus direction (see Fig. 18.36).
- Carefully position the nozzle of the lubricant gel inside the meatus and instill most of the 5 mL.
- Position the bowl between the patient's thighs to catch spillages.
- The catheter will be in a plastic wrapper with a tear-away portion near the tip. Remove this portion, being careful not to touch the catheter, and apply a little lidocaine gel to the catheter tip.
- Insert the tip of the catheter into the urethral meatus and advance slowly but firmly by feeding it out of the remaining wrapper.
- On entering the bladder, urine should start to drain. Advance the catheter fully to ensure the balloon is beyond the urethra.
- Inflate the balloon with 10 mL of water via the catheter side-arm.
- ! Warn the patient to alert you to any pain and watch her face.
- Remove the syringe and withdraw the catheter until resistance is felt.
- Attach draining tube and catheter bag.
- Clean and re-dress the patient as necessary.
- Record the residual urinary volume.

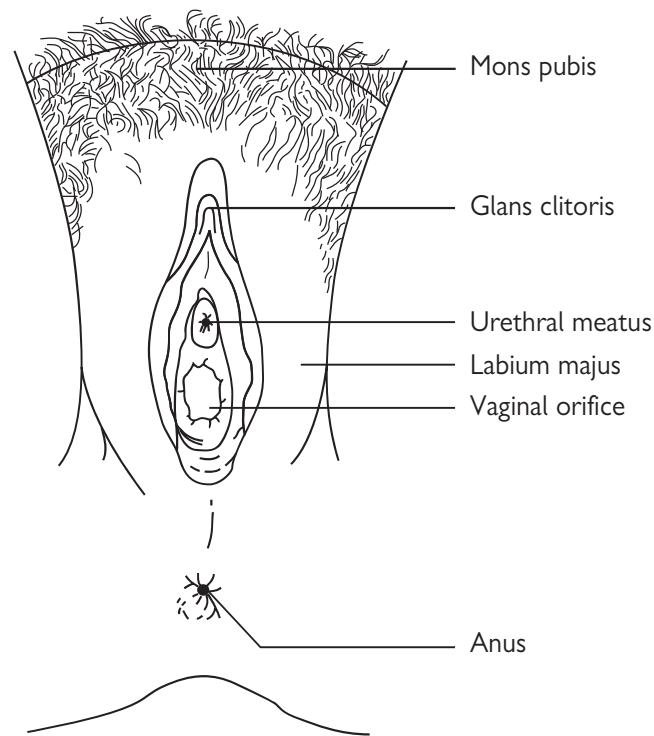


Fig. 18.36 Diagrammatic representation of the female external genitalia showing position of the urethral meatus.

Hints

- Some female patients are easier to catheterize in a different position—lying on their side with knees raised.
- Lack of urine drainage may be caused by blockage by lubricant gel, an empty bladder, or catheter misplacement.
- Attempt to aspirate urine with a catheter-tipped syringe. Feel for a full bladder. If there is any doubt about the position of the catheter, remove it immediately (deflating balloon first) and seek advice.
- Complications
 - Pain
 - Infection
 - Misplacement and trauma
- ▶ Be aware of latex allergy!