

# Urinary Catheter Insertion, after Water

## PowerPoint

**Objective:** Students should become familiar with the safe and clean insertion of a catheter into a bladder both in males and females.

**Materials:** Urinary catheters, a variety of sizes and styles, some packaged; lubricant, preferably sterile, but a tube of KY jelly will do; hard plastic syringe holders (or some other object resembling a penis); artificial female perineum (this can be made from a collapsed old soccer ball); a plastic tray; cotton balls or gauze; povidone iodine in water or some other disinfectant; exam gloves; drapes for the procedure, packaged sterile or pretend-sterile; a syringe with water for blowing up the catheter balloon. The materials should be packaged to simulate a sterile, urinary catheter package. Having a urine bag is helpful to show how it attaches to the catheter.

**Preparation:** If you do not already have male and female genitalia models construct them. Prepare a lab lecture/demonstration wherein you demonstrate the proper procedure. Then have each of the students go through the procedure in turn, first on the male model and then on the female. Village Medical Manual, Volume 1, Appendix 1 D.

### Student steps:

1. Gather materials and position yourself beside the "patient."
2. Put on your exam gloves as if they were sterile gloves.
3. Place sterile drapes above and below the penis or perineum, using sterile technique.
4. Hold the penis or separate the genital lips with your left hand; identify the urinary opening.
5. With your right hand pick up some cotton balls.
6. Have your partner pour disinfectant over the cotton balls in your right hand.
7. Use these to clean the urinary opening and then discard them.
8. Repeat these last two steps at least 2 more times.
9. Pick up the catheter with your right hand only, curling it up in your hand as shown in the manual.
10. Dip the catheter in lubricant or have your partner squirt some over the end with the holes.
11. Insert the catheter into the urinary opening once it is in, you may release your left hand.
12. Use the syringe to blow up the catheter balloon.
13. Tug gently on the catheter so the balloon lies against the urinary opening on the inside.
14. Attach a leg bag or a full-sized bag, if available. Position the bag below the body. The urine must drip at some point so that bacteria cannot ascend into the bladder.

### Guidance:

- Students find it difficult to maintain sterile technique.
- They find it difficult and awkward to wind up the catheter, using only one hand.
- They tend to go back over the urinary opening rather than going over it once and then discarding the cotton balls.
- They are amazed at the large diameter of some of the standard male catheters, as in 30 French.

- Emphasize that the urine bag needs to be below the body, that the urine should drip down at some point, and that urine should never be allowed to flow back into the bladder.
- If a catheter seems to meet obstruction, if the patient is a male, change to a larger sized catheter. If the patient is female, change to a smaller size catheter. It is helpful to play-act this with the students, to put an obstruction in a “penis,” then have the student choose a larger diameter catheter.