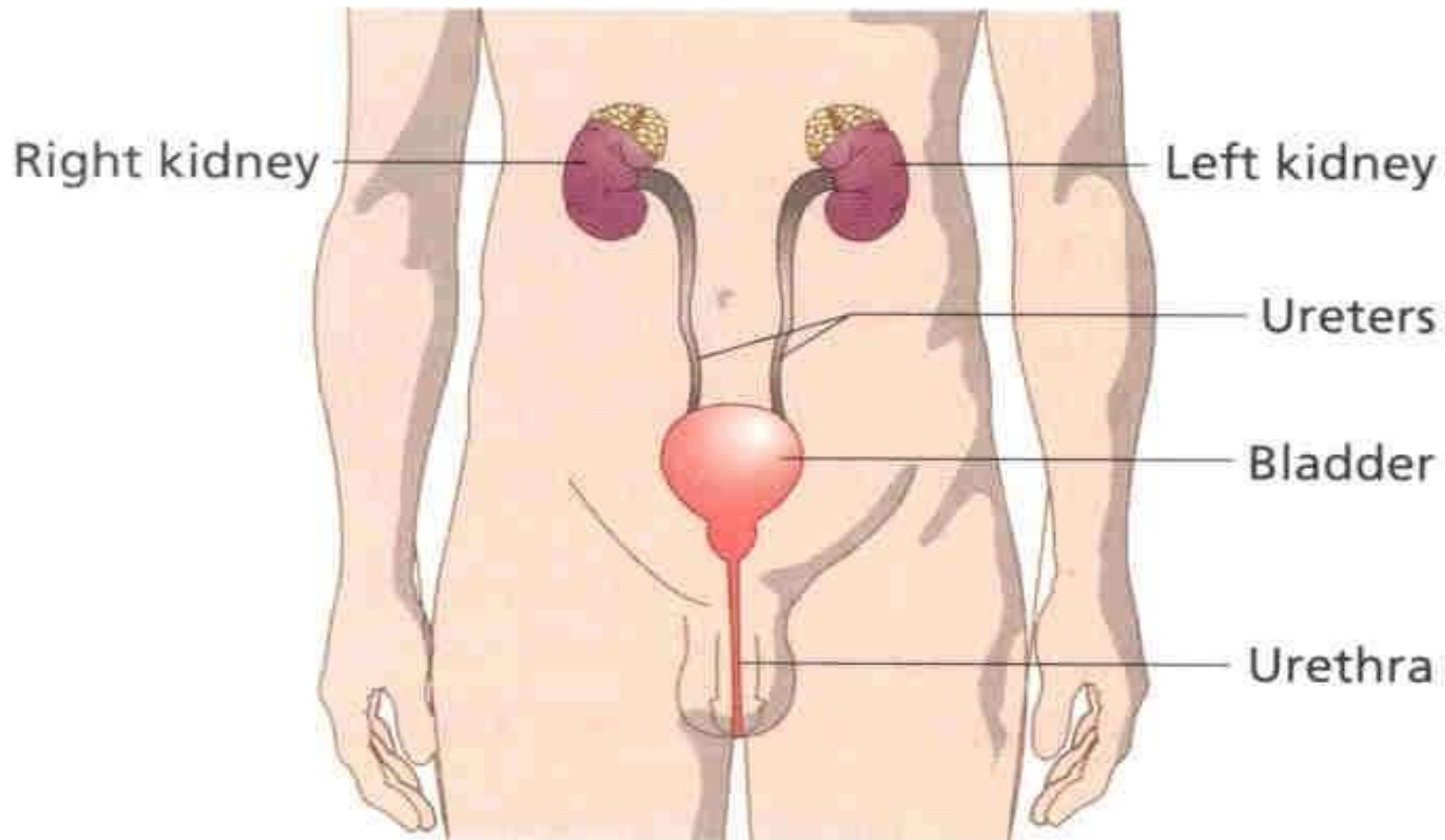


# URINARY CATHETER

## Anatomy of the Urinary System

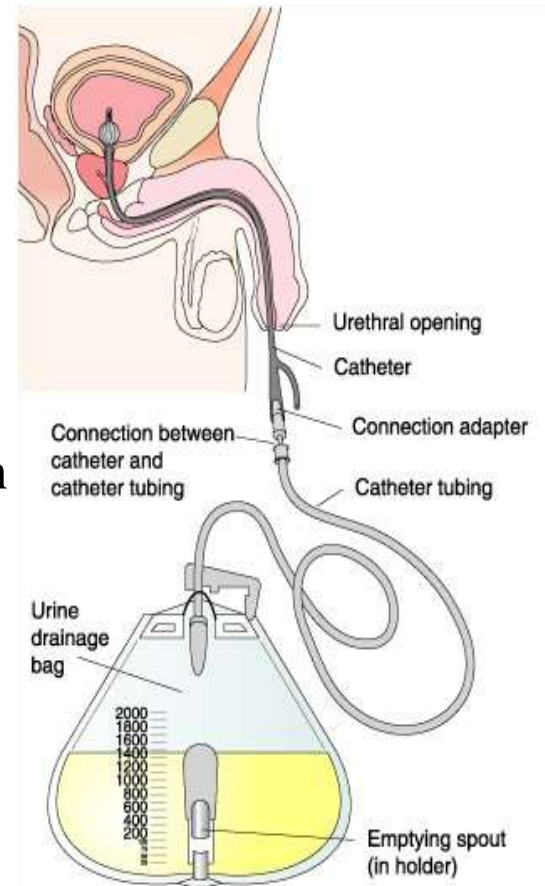


# Urinary Catheterization

- Urinary catheterization is done when a person is unable to urinate using a toilet, bedpan, urinal, bedside commode, or when accurate urinary output is required
- A urinary catheter is a tube that is inserted into the bladder through the urethra to allow the urine in the bladder to drain out

# Situations When a Urinary Catheter is Used

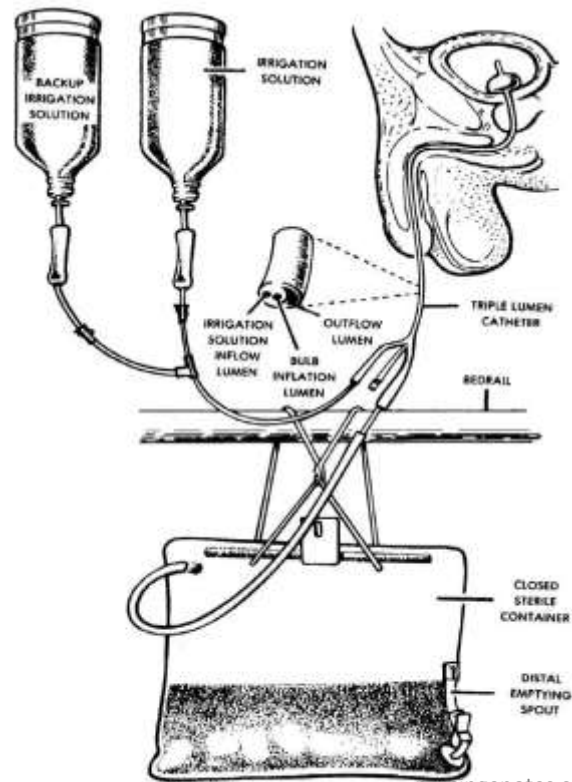
- A urinary catheter is used in many different situations:
  - A urinary catheter may be inserted to drain the bladder before or during a **surgical procedure**, during **recovery** from a serious illness or injury, or to collect urine for **testing**
  - A urinary catheter may be used for a person who is **incontinent** of urine, if the person has **wounds** or pressure ulcers that would be made worse by contact with urine
  - A urinary catheter is necessary when a person is unable to urinate because of an **obstruction** in the urethra



- A **straight catheter**, is used when the catheter is to be inserted and removed immediately.
- An **indwelling catheter**, also known as **Foley catheter**, is left inside the bladder to provide continuous urine drainage.
- A **suprapubic catheter** is a type of indwelling catheter. The suprapubic catheter is inserted into the bladder through a surgical incision made in the abdominal wall, right above the pubic bone.
- A **3-way catheter for continuous bladder irrigation (CBI)** is a type of indwelling catheter. It is inserted to irrigate the bladder to prevent obstruction (i.e. bleeding)

## 3-way CBI

Irrigations performed on intermittent or continuous basis to maintain catheter patency. A closed system can provide continuous or intermittent irrigation without disrupting sterility



# AN INDWELLING URINARY CATHETER

- Indwelling urinary catheters are connected by a length of tubing to a urine drainage bag
- The tubing is secured loosely to the person's body near the insertion site using a catheter strap or adhesive tape
- Securing the tubing to the person's body prevents the catheter from being accidentally pulled out during repositioning

## **CARING FOR A PERSON WITH AN INDWELLING URINARY CATHETER**

- A little bit of slack is left in the tubing to prevent the catheter from pulling against the bladder outlet and the urethral opening
- The remaining length of tubing is then gently coiled and secured to the bed linens using a plastic clip or safety pin

## CARING FOR A PERSON WITH AN INDWELLING URINARY CATHETER

- Coiling the tubing prevents the tubing from becoming bent or kinked, coiling the tubing and securing it to the bed linens also keeps the weight of the tubing from pulling against the person's body.
- The drainage bag is then secured to the bed frame at a level lower than the person's bladder.

## CARING FOR A PERSON WITH AN INDWELLING URINARY CATHETER

If the drainage bag and tubing are higher than the person's bladder, then gravity could cause old, contaminated urine to run back down the tubing and into the person's bladder, causing an infection.

# CARE

- Providing good catheter care is important because the presence of the catheter in the urethra provides a pathway for bacteria to travel up from the perineum into the bladder
- Having a catheter eliminates the “flushing” action of normal urination, which helps to remove bacteria from the urinary tract naturally.
- Bacteria can be introduced into the body both when a catheter is inserted and after it is in place, urinary tract infections (UTIs) in catheterized people are one of the most common nosocomial infections.



# - EMPTYING URINE DRAINAGE BAGS

- Urine drainage bags are routinely emptied and the urine measured at the end of each shift.
- Urine drainage bags should also be emptied if they are full.
- Leg bags need to be emptied frequently because they are smaller, and hold less urine.
- Be sure to monitor urine output
- Be sure to monitor urine output

# CATHETER INSERTION

- Equipment: (check packages and expiry dates)
  - Catheter tray (with drapes, fenestrated drape, cotton balls, forceps)
  - Catheter **(14-16 Fr (for women) 12 Fr for young girls (16-18 Fr (for men))**
  - Sterile drainage tubing with collection bag
  - Correct size syringe (check catheter balloon)
  - Sterile water
  - Cleansing solution
  - Lubricant
  - Sterile gloves
  - Specimen container
  - Tape to anchor tubing
  - Gloves
  - Bath blanket

# ASSESS

- ☐ Review physician's order and understand purpose of inserting catheter
- ☐ Assess client (last urination, level of awareness, understanding)
- ☐ Palpate bladder
- ☐ Identify meatus and assess skin integrity
- ☐ Identify potential difficulties (i.e enlarged prostate)

# IMPLEMENT

- ☐ Wash hands
- ☐ Provide privacy
- ☐ Raise bed, stand on left side of bed if right handed (right side if left handed)
- ☐ Arrange equipment
- ☐ Water proof pad under client
- ☐ Position & drape client

- Female: dorsal recumbent (supine with knees flexed) or Sims position (side-lying with upper leg flexed at knee and hip)
- Male: supine position
- With disposable gloves, wash perineal areas
- Wash hands
- Open tubing with collection bag (attach to bed frame and
- have tubing positioned to easily connect to catheter once inserted
- organize sterile field – add catheter, lubricant, syringe and sterile water, pour cleaning solution over cotton balls
- Apply sterile gloves

□ Lubricate catheter (2.5 to 5 cm for women) and 12.5 to 17.5 cm for men)

\*Note: there may be an order for lubricant containing local anaesthetic\*

□ Apply sterile drapes keep gloves sterile  
women: fenestrated over perineum

men: over thighs and fenestrated over penis

- Place sterile tray and contents between leg
  
- Cleanse meatus:
  - Women: with nondominant hand, expose meatus, maintain Position of hand, cleanse with forceps, wipe from front to
    - back,
    - new cotton ball each swipe, far labial fold, near, and directly over meatus
  - Men: retract foreskin, hold penis below glans, maintain position
  - of hand, with forceps clean in a circular motion from meatus down to base of glans, repeat three more times

□ Hold end of catheter loosely coiled in dominant hand, place end of catheter in tray

□ Insert catheter:

Women: ask client to bear down as if to void, insert 5 to 7.5 cm or until urine flows, then advance another 2.5 to 5 cm

Men: hold penis perpendicular, ask client to bear down, insert 17 to 22.5 cm or until urine flows, then advance 2.5 to 5cm to bifurcation



- Collect specimen if indicated
- Inflate balloon with amount indicated
- If client complains of pain, aspirate solution and advance catheter further and inflate
- Gently pull to feel resistance
- Attach catheter to collection bag and attach to bed frame below bladder
- Allow bladder to empty unless policy restricts (500 to 1000 ml)
- Anchor catheter (thigh if appropriate and coil tubing on bed and attach to mattress)

# EVALUATE

- ☐ Palpate bladder
- ☐ Assess comfort
- ☐ Characteristics and amount of urine

# DOCUMENT

- ☐ Report and record type and size of catheter
- ☐ Amount of fluid used to inflate balloon
- ☐ Characteristics of urine, amount, reason for catheter, specimens, client's response