# Indwelling Urinary Catheters

Home Health Aide Continuing Education

Tufts Medicine Care at Home 2024

## Objectives

- Explain what an indwelling catheter is
- Describe the difference between a foley catheter and a suprapubic catheter
- Describe infection control procedures to practice when caring for a patient with an indwelling catheter



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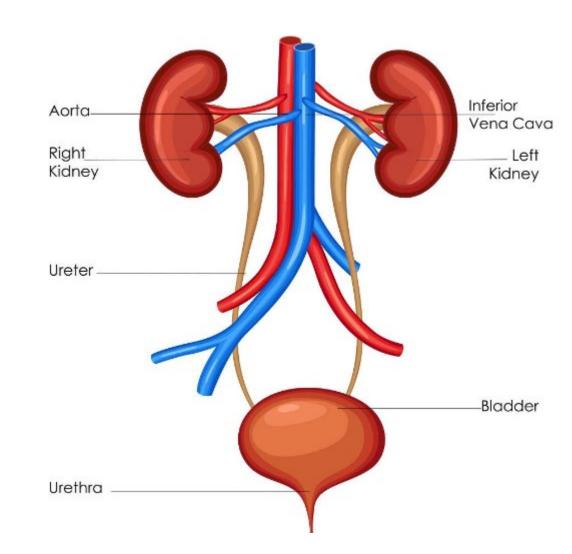
### Overview

- You may be asked to care for a patient to has an indwelling urinary catheter
- This course will explain what an indwelling catheter is, how to provide proper catheter care, and your role in preventing infections related to indwelling catheters



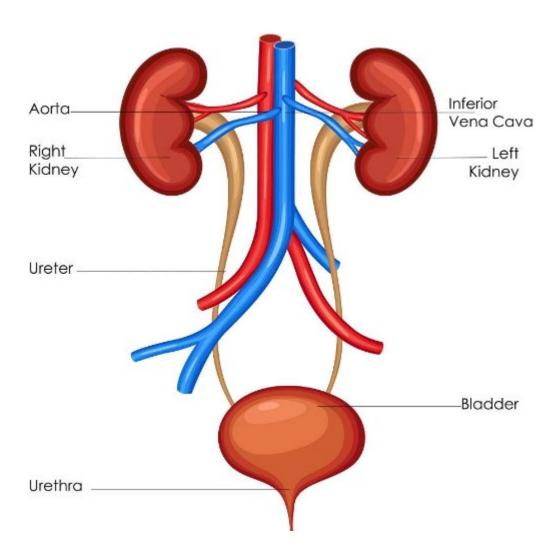
## The Urinary System

- The urinary system is the body's drainage system for removing urine from the body
- It consists of:
  - Kidneys (right and left)
  - Ureters
  - Bladder
  - Urethra



## The Urinary System

- The kidneys filter blood to form urine
- Urine passes through the ureters to the bladder, where it is stored
- Urine passes from the bladder through the urethra to outside of the body during urination
- Male and female urinary systems are very similar, differing only in the length of the urethra



## **Reasons for a Urinary Catheter**

- Urinary Incontinence- inability to control bladder
  - Some people have slight loss of urine after sneezing, coughing, laughing, or heaving lifting; this is called *stress incontinence*
  - Other people are completely unable to control urination



## **Reasons for a Urinary Catheter**

- Urinary Retention- a condition in which a person cannot empty all the urine from the bladder
- Symptoms of urinary retention:
  - Frequent urination of small amounts
  - Slow urine stream
  - Urgent need to urinate but with little success
  - Feeling the need to urinate after finishing urination
  - Leaking urine without warning or urge
  - Lower abdominal and/or lower back pain
  - Bloating in lower abdomen
- Can happen suddenly or get worse over time
- Catheter may be needed to empty the bladder



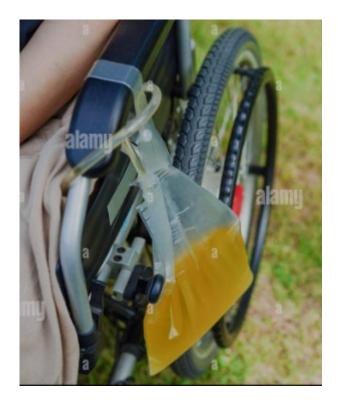
## **Reasons for a Urinary Catheter**

### Surgery

 A patient may have had a surgery that makes a catheter necessary to drain the bladder before, during or after surgery- for example, bladder or prostate surgery

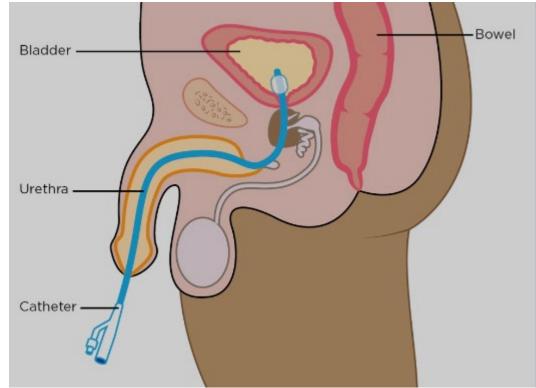
### **Health Problems**

• Health conditions such as multiple sclerosis, spinal cord injuries, or dementia may require indwelling catheter



### What is an Indwelling Catheter?

- "Indwelling" = inside the body
- A flexible tube inserted through the urethra into the bladder and left in place for a period of time
- Catheter allows urine to drain from the bladder into a collection bag outside the body
- Catheter is held in place by a water-filled balloon
- Often referred to as Foley catheter; Foley is a type of indwelling catheter



### What is an Indwelling Catheter?

### **Suprapubic Catheter**

- "Suprapubic" = above the pubis
- A type of indwelling catheter that is inserted into the bladder through a cut in the abdomen a few inches below the belly button
- Suprapubic catheter is usually more comfortable and less likely to cause infection
- Patient may experience skin sores or irritation where catheter is inserted



### **External Catheters**

You may see patients with catheters that are placed outside the body, not inside like an indwelling catheter. These are called external catheters and there are two main types:

- Condom catheter for males
- Urine-wicking system for females

The focus on this course is on indwelling catheters but principles of hand hygiene and infection control apply to all types of catheters



## Hand Hygiene

From TMCAH Hand Hygiene Policy:

### • Purpose of Hand Hygiene:

 Removes contaminants from the hands and decreases the risk of spreading contamination between patients and the environment

### • When to Clean Hands:

- Before and after patient contact
- Before moving to soiled body site to a clean body site on the same patient
- Before putting gloves on and after removing gloves
- After contact with any body fluids, non-intact skin, or wound dressings
- After handling any equipment or linens contaminated with body substances
- Before entering clinical bag
- After using restroom



## Hand Hygiene



From TMCAH Hand Hygiene Policy :

#### • Washing with Soap and Water:

- Wet hands under warm water. Apply soap. Rub hands together for at least 15 seconds
- Scrub between fingers, around backs of fingers and fingertips and nails, around and under any rings
- Dry hands with disposable paper towel. Do not use any cloth product in the patient's home
- Turn off water using paper towel to avoid contaminating hands. Discard paper towel.

#### • Washing with Alcohol-Based Hand Rub:

- For when hands are not visibly soiled
- Must be at least 60% ethanol
- Apply rub to one palm and vigorously rub hands together, spreading solution thoroughly over both hands. Continue until hands are dry

#### • Fingernails:

- Staff providing direct care to patients are not allowed to wear artificial fingernails or extenders and must maintain natural tips no longer than ¼ inches long.
- Nail jewelry not allowed, and nail polish must not be cracked, chipped, or scratched

## Securing the Urinary Catheter

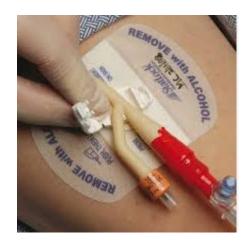
- Urinary catheter are inserted by physicians and nurses. Aides should not be asked to insert a catheter
- Catheter must be secured after placement to prevent catheter from sliding out of the urethra, and to prevent pulling and harm to the patient
- Catheters can be uncomfortable, causing patient to become agitated and pull on their catheter. They may pull it out, sometimes with balloon still inflated. If your patient has confusion this is more likely





### Securing the Urinary Catheter

- Make sure catheter and drainage tube are securely connected
- Be sure there is sufficient slack in the tube between the body and the thigh, so that patient can move their thigh without pulling on the catheter
- Secure the catheter using securement device and any instructions provided by the RN
- Drainage bag should be hung from or attached to a part of the bed frame that does not move, should never touch the floor, and should be kept below the level of the bladder to allow drainage by gravity



### **Preparation:**

- Position patient comfortably
- Seek caregiver assistance if needed
- Perform hand hygiene and apply clean gloves
- Cover patient with drape to provide privacy
- Position patient in a way to be able to see patient's catheter and urethral meatus (legs apart for female). Ask caregiver for assistance holding legs apart if needed

### Females:

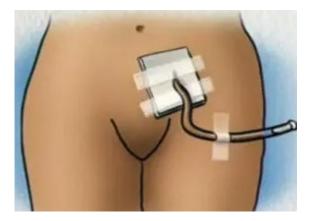
- Spread labia and wash with soap and water from top to bottom (clitoris to rectum)
- Wash where catheter is inserted into the urinary meatus and about 6-10 inches outward
- Rinse and dry using the same procedure as washing.

### Males:

- Wash with soap and water from urinary opening to the scrotum
- Wash where catheter is inserted into the urinary meatus and about 6-10 inches outward
- Rinse and dry using the same procedure as washing
- If patient is uncircumcised, retract the foreskin prior to washing, rinsing and drying. Replace foreskin after washing and drying to prevent swelling and impaired circulation

### **Suprapubic Catheter Care:**

• Perform hand hygiene, apply gloves



- Gently remove any dressing material around catheter insertion site and discard.
- Remove gloves and discard
- Perform hand hygiene and apply clean gloves
- Wash skin around catheter insertion site with washcloth and warm soapy water. Dry completely with clean paper towel
- Wash about 4 inches of catheter tube starting at insertion site and away from body. Do not wash towards insertion site
- Apply 4 inch gauze around catheter insertion site and secure with tape

## Draining and Disposing of Urine

#### Suprapubic Catheter Care:

- Perform hand hygiene, apply gloves
- Hold bottom of catheter bag over toilet or container
- Open urine drain valve and allow urine to drain
- When the drainage bag is empty, close the drain, wipe the end of the drain with an alcohol wipe, and close the valve on the drain.
- Close valve
- Empty bag at least once per day, more often it fills quickly
- Emptying bag regularly helps prevent infection, reduce urine odors, and keep the urine flowing
- Always keep bag below level of catheter insertion site to allow urine to drain via gravity and do not place bag on floor

## Urinary Tract Infection (UTI)

A UTI is an infection in any part of the urinary system, most often in the bladder. Patients with urinary catheters are at risk of developing UTIs. There are things you can do to prevent UTIs from occurring:

- Perform hand hygiene before any care
- Maintain closed drainage system- keep catheter bag connected unless you are asked to change bag
- Perform catheter hygiene frequently
- Keep the bag below the bladder
- Be sure bag is secured without obstructing urine flow
- Do not use powders, deodorants or creams around catheters
- Do not share catheter care supplies between patients

### **Catheter Problems**

Report any of the following problems to your manager or the Registered Nurse right away:

- Leaking around catheter
- Catheter is dislodged or pulled out
- No urine in drainage bag
- Complaints of burning at urethral meatus
- Pain around catheter
- Stomach pain
- Bloody urine
- Constipation
- Fever



### **Catheter Problems**

- If patient or caregiver has questions about the catheter, relay their questions to the RN
- If catheter has fallen out, do NOT attempt to replace it. Keep patient dry with absorbent towels or a diaper/brief
- If suprapubic catheter comes out, cover opening with sterile gauze if available
- Notify RN or your manager right away of any catheter problems

## Summary

- The parts of the urinary system and that they work together to make and drain urine from the body
- What an indwelling catheter is and that the benefit of a closed urinary drainage system is preventing bacteria from entering the urinary system
- Proper hand hygiene necessary to prevent UTIs
- Importance of securing indwelling catheter to prevent harm to patients and minimize risk of bacteria entering the urinary system