SNS COLLEGE OF NURSING

SARAVANAMPATTI,COIMBATORE

UNIT-V

ELIMINATION NEEDS
IN NURSING FOUNDATION

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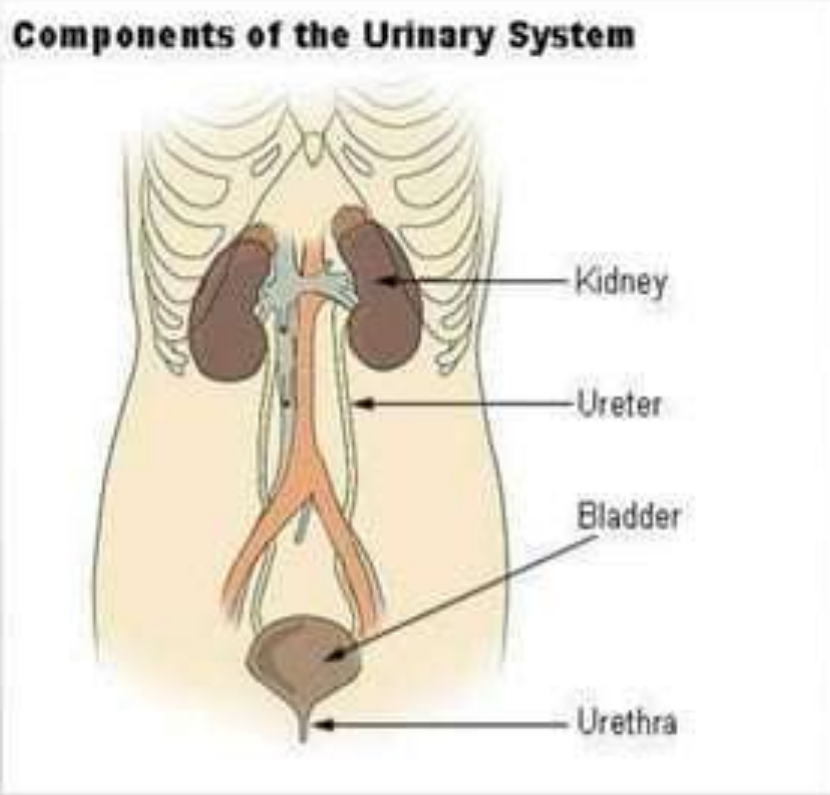
PROFESSOR

ELIMINATION

Quick Anatomy Moment

- Kidneys
- Ureters
- Bladder
- Urethra



Urinary Elimination

Urine formation

Filtration – filters blood

- does not filter out RBC's & protein

Reabsorption – as needed

Water, electrolytes, glucose

Secretion

H,K ammonia, creatinine, uric acid

Micturition

The process of emptying the bladder

- Contraction of detrusor muscle
- Increases pressure on bladder to produce urge to urinate
- Pressure overcomes the internal sphincter
- Urine enters urethra
- Requires relaxation of external sphincter

Characteristics of Normal Urine

- Volume – approx 250ml-400ml per void
  - normal production 30ml/hour
  - 1200-1500cc for average adult per 24 hours
  - 500-600 newborns
- Color
  - light yellow
- Clarity
  - clear without sediment
- Odor
  - no odor

Factors Affecting Urination

- Fluid Intake – influences output and frequency
- Hypovolemia- loss of fluid
- Nutrition – food content, salt, ETOH, caffeine
- Body position – work with gravity
- Cognition – dementia/confusion, stroke

Factors Affecting Urination (cont.)

- Psychological factors – stress, running water, warm water, privacy
- Obstruction – anatomical, disease process
- Infection – E. coli
- Medications – diuretics

Altered Urinary function

- Dysuria
- Polyuria
- Oliguria
- Urgency
- Frequency

Altered Urinary function (cont.)

- Nocturia
- Hematuria
- Pyuria
- Urinary retention

Incontinence

- Stress

  increased abdominal pressure

- Functional

  unable to get to bathroom

- Total

  continuous, involuntary

Diagnostics

- Random specimen
  - does not need to be sterile
  - into container or nun's cap
- Clean catch
  - sterile
  - three wipes

Diagnostics (cont.)

- 24 hour
  - -kidney function
  - - must include all urine
  - - timing

- Catheter sample
  - - sterile
  - - straight cath or indwelling

Collecting urine from young children

- Catheterization not recommended
- Use of collection bag

Tests

- Specific gravity
  - weight or concentration of urine compared to water
  - urinometer
  - normal adult 1.010 – 1.025

- Reagant strips
  - dipped in urine
  - measures substances in urine such as glucose, proteins & ketones

Tests (cont)

- Urinalysis
  - most common
    - 20cc-30cc sample

- Urine C&S
  - identify microorganisms
    - 24 to 48 hours
    - often related to antibiotic use

Urinary Health Promotion

- Intake
- UTI's
- Muscle tone

Urinary catheters

- Indications

  -inability to void, accurate measurement, irrigation, comfort

- Types

  - straight, indwelling (Foley), triple lumen

- Risks

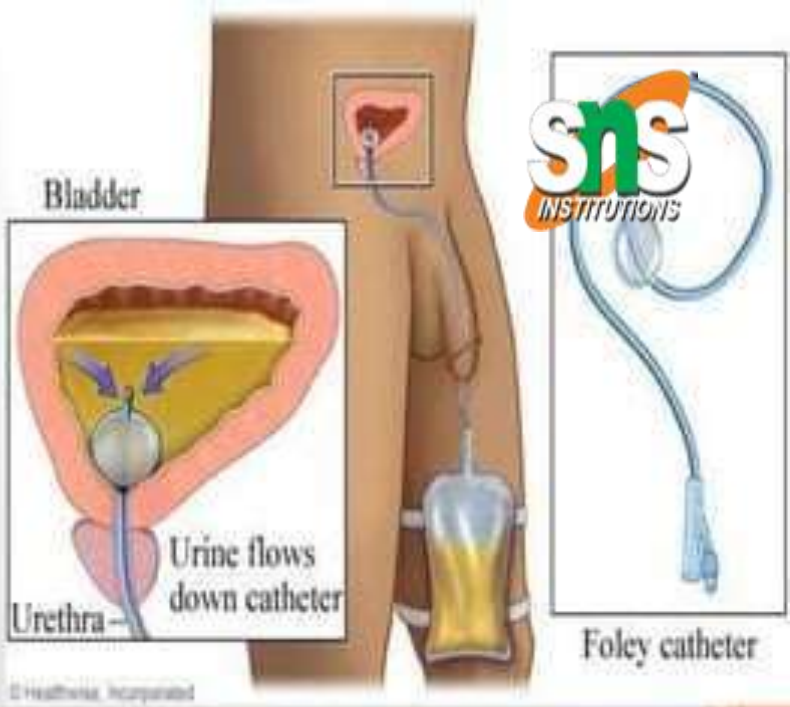
  - infection, trauma

Straight catheterization

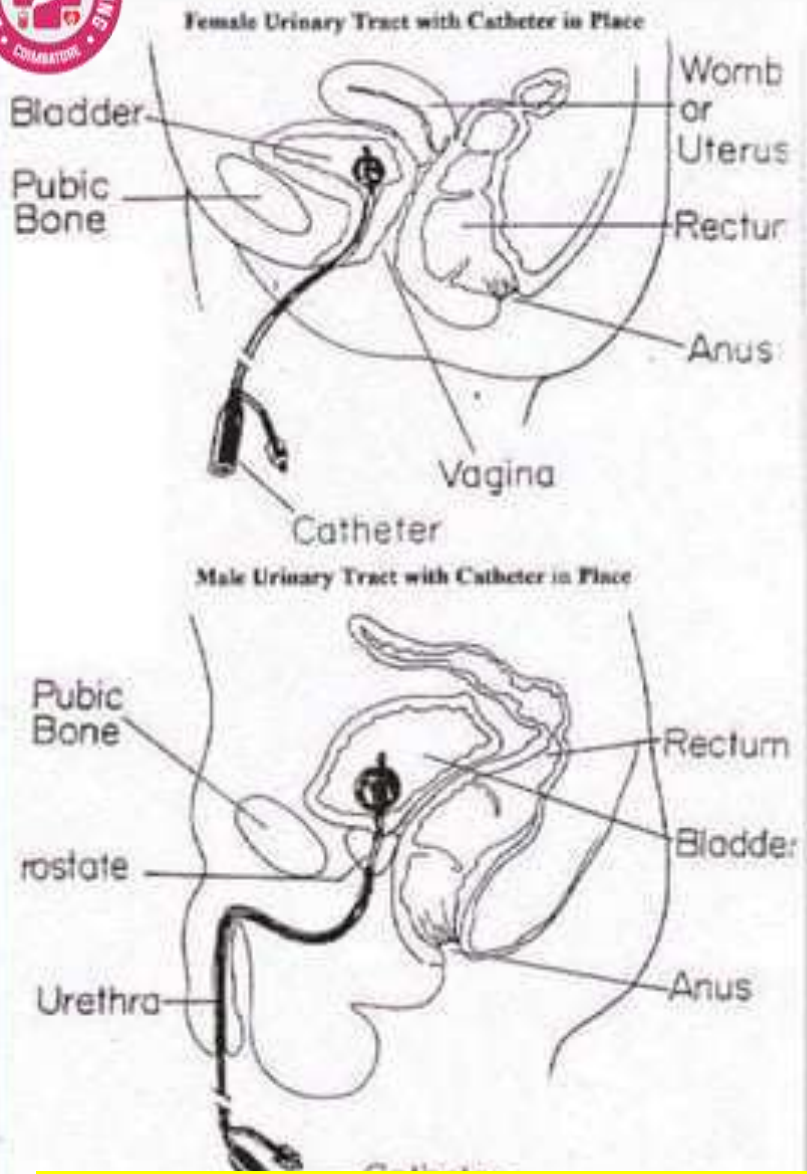
- Wash hands
- Check pt ID
- Explain procedure
- Position patient
- Open kit
- Bottom drape
- Sterile gloves
- Top drape
- Pour betadine on cotton balls
- Open lubricant
- Nondominant vs dominant hands
- Insert and advance
- Sample if needed
- Reposition patient, remove gloves, wash hands document

Indwelling catheterization

- Wash hands
- Check pt ID
- Explain procedure
- Position patient
- Open kit
- Bottom drape
- Sterile gloves
- Top drape
- Test balloon
- Pour betadine on cotton balls
- Open lubricant
- Nondominant vs dominant hands
- Insert, advance & inflate balloon
- Sample if needed
- Reposition patient, strap to leg, remove gloves, wash hands document



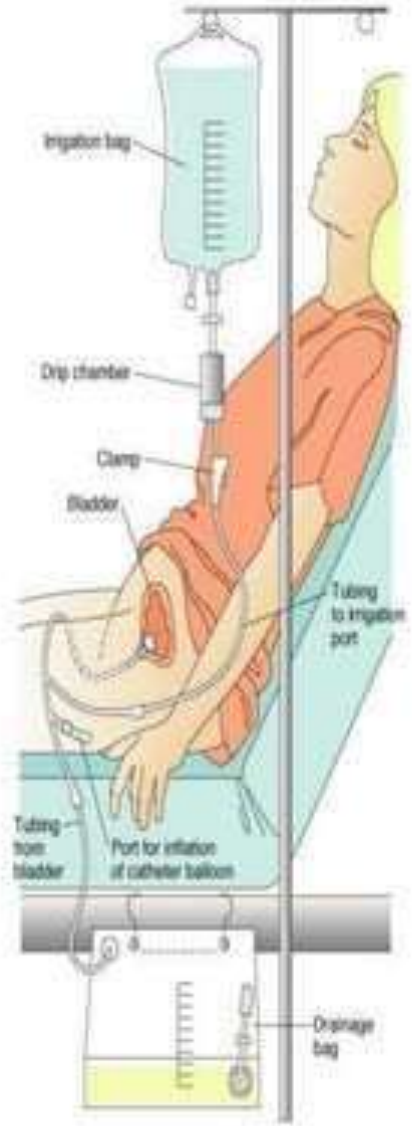
Indwelling catheter (Foley)



Nursing Responsibilities

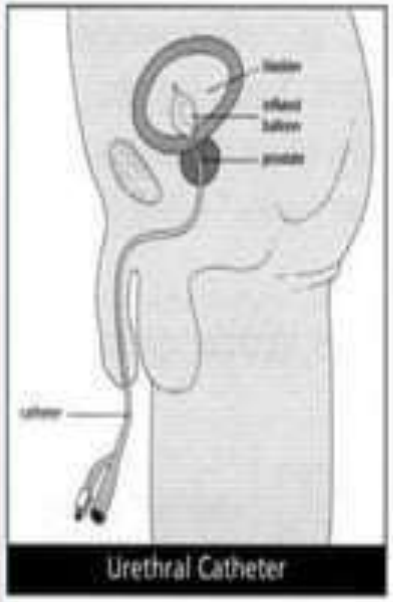
- Placement and removal
- Assessment
- Sample collection
- Troubleshoot
- Irrigate when needed

Bladder irrigation

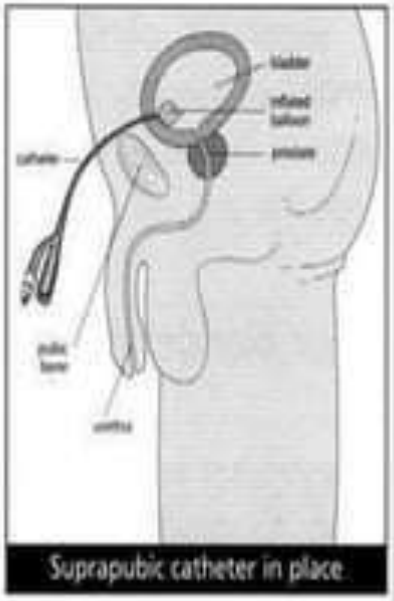


Other types of urinary catheters

Suprapubic



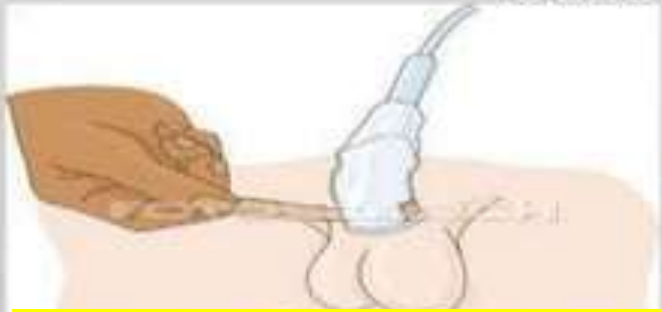
Urethral Catheter



Suprapubic catheter in place

Nephrostomy tubes

Condom Catheter



Other related urinary components

- Dialysis
- Bladder scanner

Hemodialysis

Peritoneal dialysis