Urinary elimination

Chapter 47
Urinary elimination

- Urinary elimination depends on effective functioning of four urinary tract organ:
  1. Kidneys
  2. ureters
  3. bladder
  4. and urethra.

- Urination: micturation, voiding, and urination all refer to the process of emptying the urinary bladder.

- Urine collection in the bladder until pressure stimulate special sensory nerve ending in the bladder called stretcher receptor:
  - This occur one the adult bladder containing between 250 and 450 ml of urine. In children 50 to 200 ml stimulate the nerve
Factor affecting voiding:
- Developmental factor
- Psychological factor
- Fluid and food intake
- Medication diuretics
- Muscle tone
- Pathologic condition
- Surgical and diagnostic procedures
Altered urinary production

- **Polyuria**: Refer to the production of abnormal large amount of urinary by the kidneys.

- **Oliguria and anuria**: are used to describe as decreased urinary output.
  - **Oliguria**: is a low urine output. Usually less than 500 ml a day or 30 ml an hour.
  - **Anuria**: lack of urine production
  - Altered urinary elimination.
Altered urinary elimination

- **Urinary Frequency**: is voiding at frequent interval that is more often than usual.

- **Nocturia**: is the feeling that the person must void. It is usually expressed in a term of the number of times the person's get out of bed to void.

- **Urgency**: is the feeling that the person must void. There may be or may not a great deal of urine in the bladder.

- **Dysuria**: means voiding that is either painful or difficult.

- **Urinary hesitancy**: a delay in initiating voiding.
Altered urinary elimination

- **Enuresis:** is involuntary urination in children beyond the age when voluntary bladder control is normally acquired, usually 4 or 5 years.

- **Nocturnal enuresis:** or bed wetting involuntary passing of urine during sleep.

- **Urinary incontinence:** involuntary urination is symptom not a disease, physiologic or psychologic.

- **Urinary retention:** when emptying the bladder is impaired, urine accumulate and the bladder become over distended.

- **Nurogeninc bladder:** Impaired neurological function can interfere with normal mechanism of urine elimination.
Nursing management

Assessing:
- Nursing history
- Physical assessment
- Assessing urine
- Measuring urinary output
- Measuring residual urine (urine remaining in the bladder following the voiding)
- Diagnostic test (BUN, creatine)

Diagnoses
- Functional urinary incontinence.
- Stress urinary incontinence.
- Urinary retention.
Planning
- Maintain or restore normal voiding pattern.
- Regain normal urine output.

Implementation
- Maintaining normal urinary eliminating.
- Promoting fluid intake.
- Monitoring normal voiding habits.
- Assisting with toileting.
- Preventing urinary tract infection.
- Managing urinary incontinence: Applying external urinary derange device.
- Managing urinary retention: Urinary catheterization.

Evaluation