



มหาวิทยาลัยราชภัฏนครปฐม



4172701 Adult Nursing 1

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Learning outcomes



- Describe patients with abnormalities in the urinary system.
- Describe Pathology, signs and symptoms of patients with abnormalities in the urinary system.
- Describe treatment in patients with abnormalities in the urinary system.
- Describe nursing diagnosis and nursing care in patients with abnormalities in the urinary system.

Urinary tract disorders: overview



- urinary tract infection : cystitis, Pyelonephritis
- acute glomerulonephritis
- Lithiasis
- CA bladder
- neurogenic bladder
- acute kidney injury
- chronic kidney disease
- male reproductive disorders

Urinary tract disorders

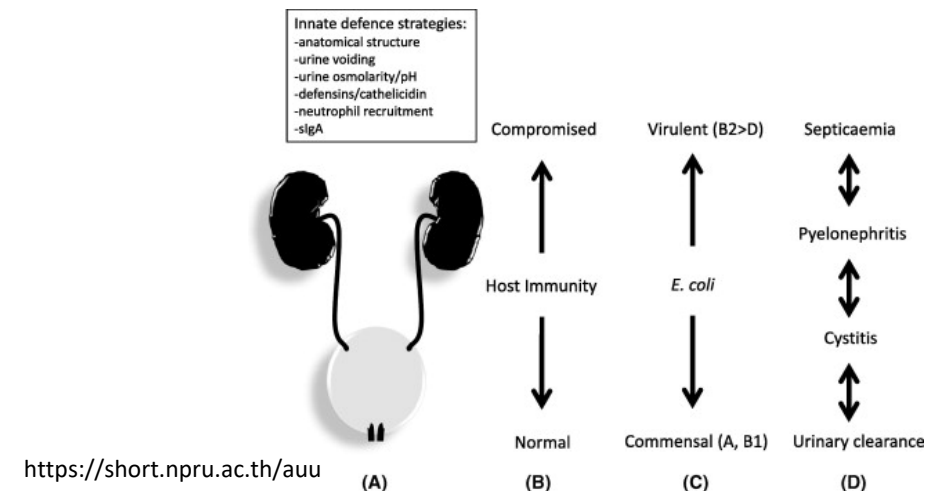
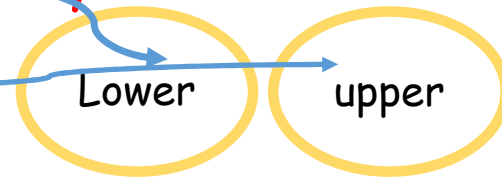


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Part 1 Infection

urinary tract infection: UTI

- Inflammation of urinary tract following bacterial invasion.
- Infection of bladder is otherwise known as **Cystitis** and infection of kidney and upper tracts is **Pyelonephritis**.
- UTI has 2 categories:
 - Uncomplicated UTI - in an otherwise normal urinary tract
 - Complicated UTI - in abnormal or male urinary tract

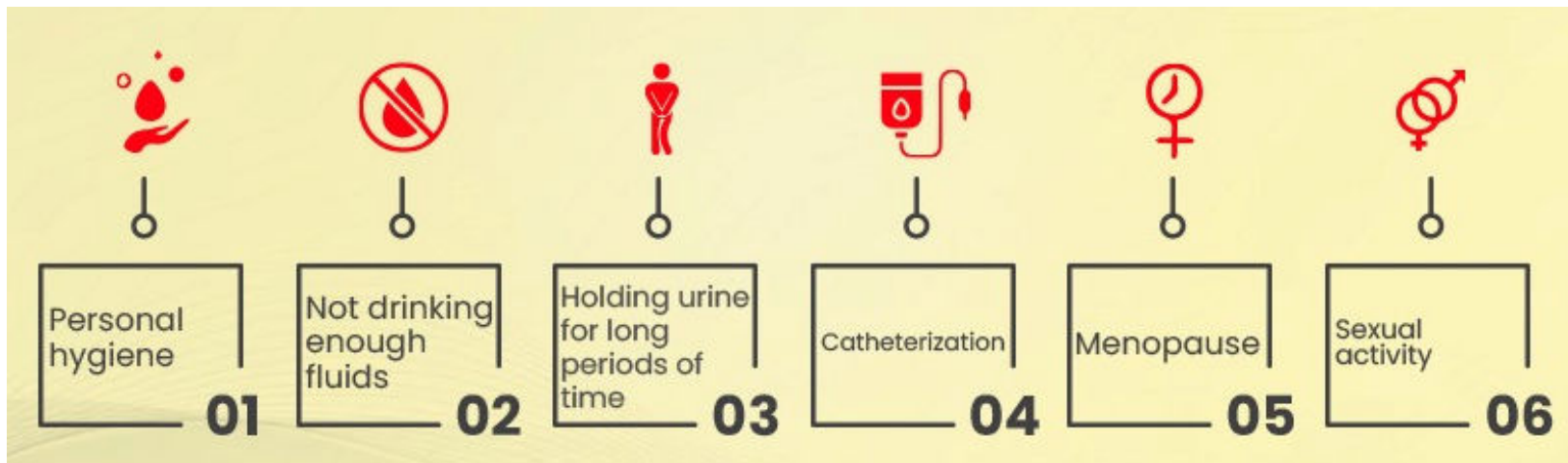


urinary tract infection: UTI

Most common causative organism:

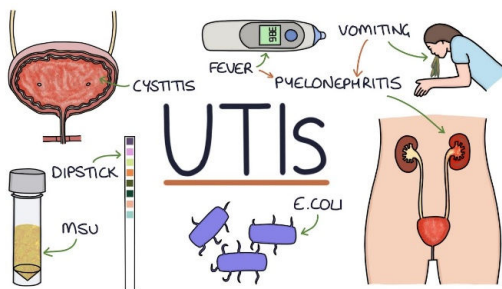
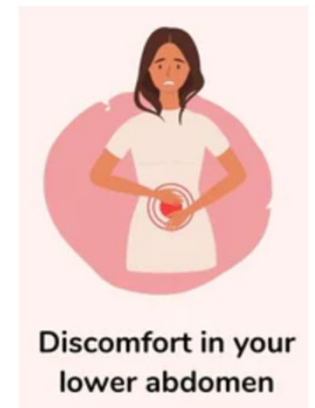
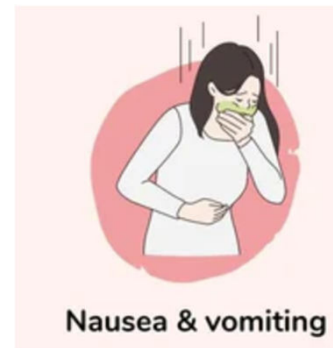
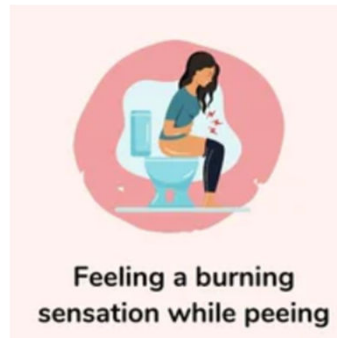
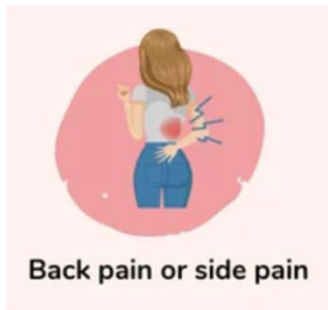
- E.coli
- Proteus mirabilis (associated with stones)
- Klebsiella

Causes of UTI



urinary tract infection: UTI

Signs & Symptoms



urinary tract infection: UTI

UTIs are usually diagnosed using a combination of a physical exam, medical history, and laboratory tests.

- Urinalysis (UA)
- Urine culture (UC)
- X-ray: Plain KUB, IVP, retrograde pyelography, CT scan, MRI
- Cystoscopy

urinary tract infection: UTI

Treatment Of UTIs

- Drinking plenty of water
- Taking over-the-counter pain relievers
- Using a heating pad
- Applying a cold pack to the lower abdomen
- Consuming vitamin C
- Antibiotics:
 - Uncomplicate UTI → 3 day course of oral ABO
 - complicate UTI → 7 day course of oral ABO & IV ABO

urinary tract infection: UTI

Nursing Care Plans:

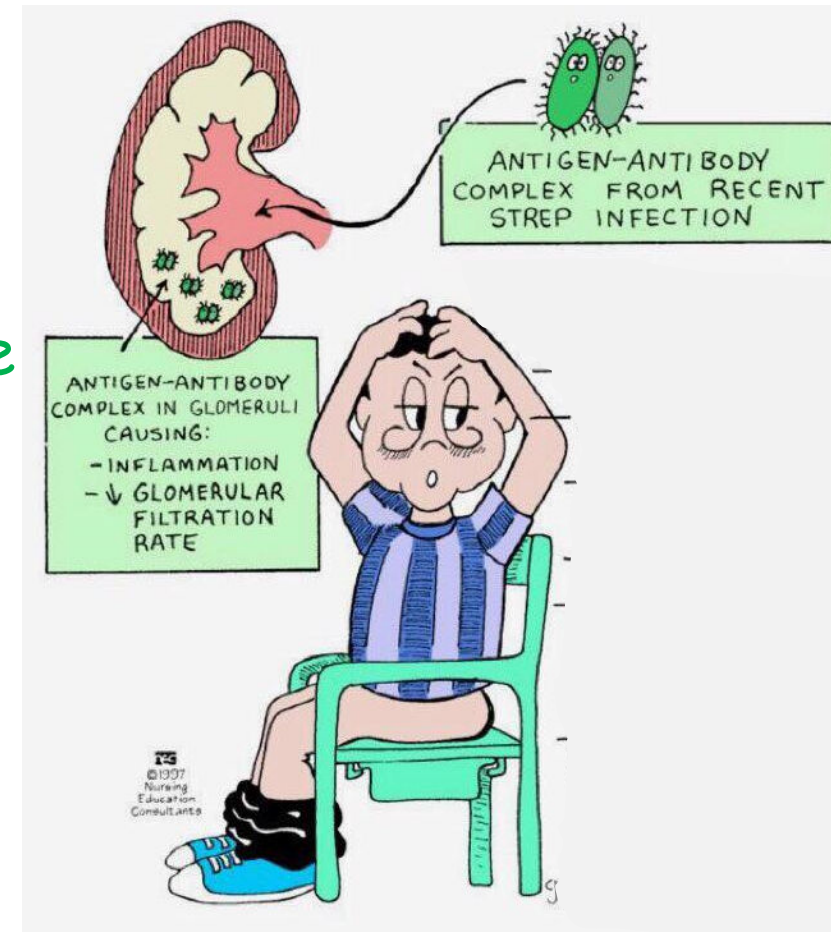
- Acute Pain Related to Inflammatory process
- Hyperthermia Related to Disease process



- ◆ Control of pyrexia:
- ◆ Tepid sponging or cold compresses
- ◆ Anti-pyrexials
- ◆ Monitor 4-hourly TPR
- ◆ Maintain IV therapy/ fluid balance
- ◆ Encourage oral fluids as tolerated and frequent voiding
- ◆ IV antibiotics
- ◆ Mouth care as required

Glomerulonephritis

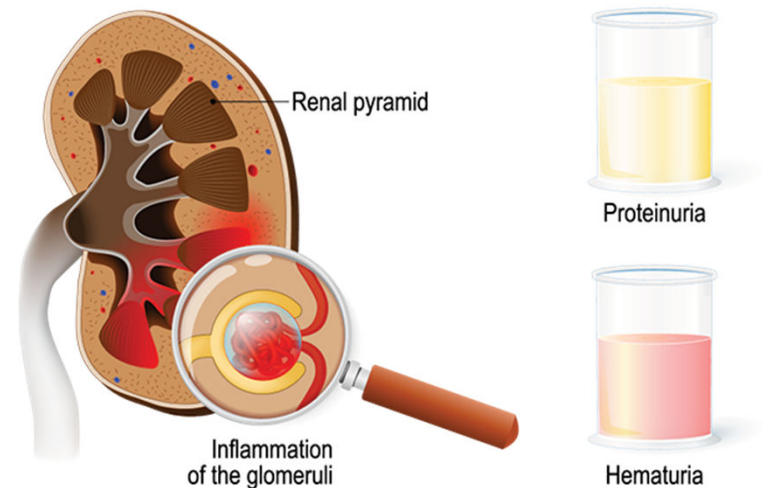
- Glomerulonephritis is inflammation of the glomeruli.
- Glomerulonephritis can be caused by various disorders, such as infections, an inherited genetic disorder, or autoimmune disorders.
- Glomerulonephritis can come on acute or chronic.



Glomerulonephritis

Signs and symptom

- **Hematuria:** Pink or cola-colored urine from red blood cells in urine
- **Proteinuria:** Foamy or bubbly urine due to excess protein in the urine
- **Hypertension**
- **Edema:** Fluid retention with swelling evident in face, hands, feet and abdomen.
- **Urinating less than usual**
- **Nausea and vomiting**
- **Muscle cramps**
- **Fatigue**



Glomerulonephritis



Physical Exam

- signs and symptoms
- Blood tests: CBC, BUN, Cr., Electrolyte, cholesterol
- Urine tests
- Kidney biopsy

Glomerulonephritis



Treatment

- Antihypertensive drug
- Diuretic
- Corticosteroid, immunosuppressive
- Dietary restriction: LP,LS
- Dialysis in severe case
- Kidney transplant

Glomerulonephritis

Nursing diagnosis



- Ineffective breathing pattern related to the inflammatory process.
- Excess fluid volume related to edema resulting from oncotic fluid shift caused by serum protein loss and renal retention of salt and water
- Imbalanced nutrition less than body requirements related to anorexia, nausea, vomiting.





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