Component 3-Terminology in Healthcare and Public Health Settings

Unit 12-Urinary System

Urinary System Objectives

• Define, understand and correctly pronounce medical terms related to the urinary system
• Describe the following related to the urinary system
  – common diseases and conditions
  – laboratory and diagnostic procedures
  – medical and surgical procedures
  – medications

Urinary System Anatomy

• Urinary System
  – Kidneys
  – Ureters
  – Urinary Bladder
  – Urethra
Kidneys

• Functions
  – Elimination of organic waste
  – Regulation of
    • Homeostasis
    • Acid-base balance
    • Red blood cell production
    • Blood pressure
  – Elimination of toxic substances

Diseases and Disorders of the Urinary System

• Bladder Diseases
  – Cystitis
  – Urinary tract infection
  – Urinary incontinence
  – Interstitial cystitis

• Diagnostic Tests
  – Urine tests
  – X-rays
  – Cystoscopy

• Treatment
  – Medications
  – Surgery

Diseases and Disorders of the Urinary System

• Bladder Cancer
  – Location
    • Lining of the bladder
  – Sixth most common type of cancer in US
  – Risk Factors
  – Symptoms
  – Treatment
    • Surgery
    • Radiation
    • Chemotherapy
    • Biologic Therapy (immunotherapy)
Diseases and Disorders of the Kidney

• Kidney stones
  – Also called nephrolithiasis
  – Symptoms
    • Back or side pain that won’t go away
    • Blood in the urine
    • Fever and chills
    • Vomiting
    • Urine that smells bad or looks cloudy
    • Burning pain when urinating

Diseases and Disorders of the Kidney

• Kidney stones
  – Also called nephrolithiasis
  – Symptoms
  – Diagnostic tests
    • Intravenous pyelogram
  – Treatment
    • Lithotripsy
      – Extracorporeal shock wave lithotripsy (ESWL)

Disorders and Diseases of the Kidney

• Kidney Damage
  – Risk Factors
    • Diabetes (Diabetic nephropathy)
    • High blood pressure
    • Family history of disease

• Kidney Failure
  – End-stage renal disease (ESRD)
  – Renal failure
Disorders and Diseases of the Kidney

- Treatment for Renal Failure
  - Dialysis
    - Hemodialysis
    - Peritoneal dialysis
  - Kidney Transplantation
    - Most common transplants
    - Sources of transplants
      - Living related donor
      - Living unrelated donor
      - Deceased donor

Disorders and Disease of the Kidney

- Wilms Tumor
  - Nephroblastoma
  - Affects children
  - Curable
  - Symptoms
    - Lump in the abdomen
    - Blood in the urine
  - Treatment
    - Surgery
    - Chemotherapy
    - Radiation
    - Biologic therapy

Disorders and Disease of the Kidney

- Renal Cancer
  - Location
  - Risk Factors
  - Symptoms
    - Blood in the urine
    - Lump in the abdomen
    - Unexplained weight loss
    - Side pain
    - Loss of appetite
Disorders and Disease of the Kidney

- Renal Cancer
  - Location
  - Risk Factors
  - Symptoms
  - Treatment
    - Surgery
    - Radiation
    - Chemotherapy
    - Biologic Therapy

Urinary System Combining Forms

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<th>Word Part</th>
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Unit 12

Tell me, Detective . . .
An elderly white male presented to his family practitioner complaining of blood in his urine. After evaluation and testing, he was diagnosed with bladder cancer. What are the therapies or treatments the family practitioner should discuss with the patient?
For additional information on content covered in this unit, please visit: