

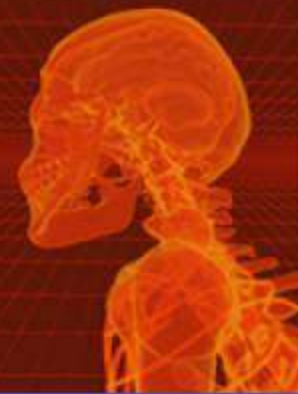
MEDICAL TERMINOLOGY

FOR HEALTH PROFESSIONS

ANN EHRLICH

CAROL L. SCHROEDER

Sixth Edition



Chapter 9

The Urinary System



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Overview of Structures, Combining Forms, and Functions

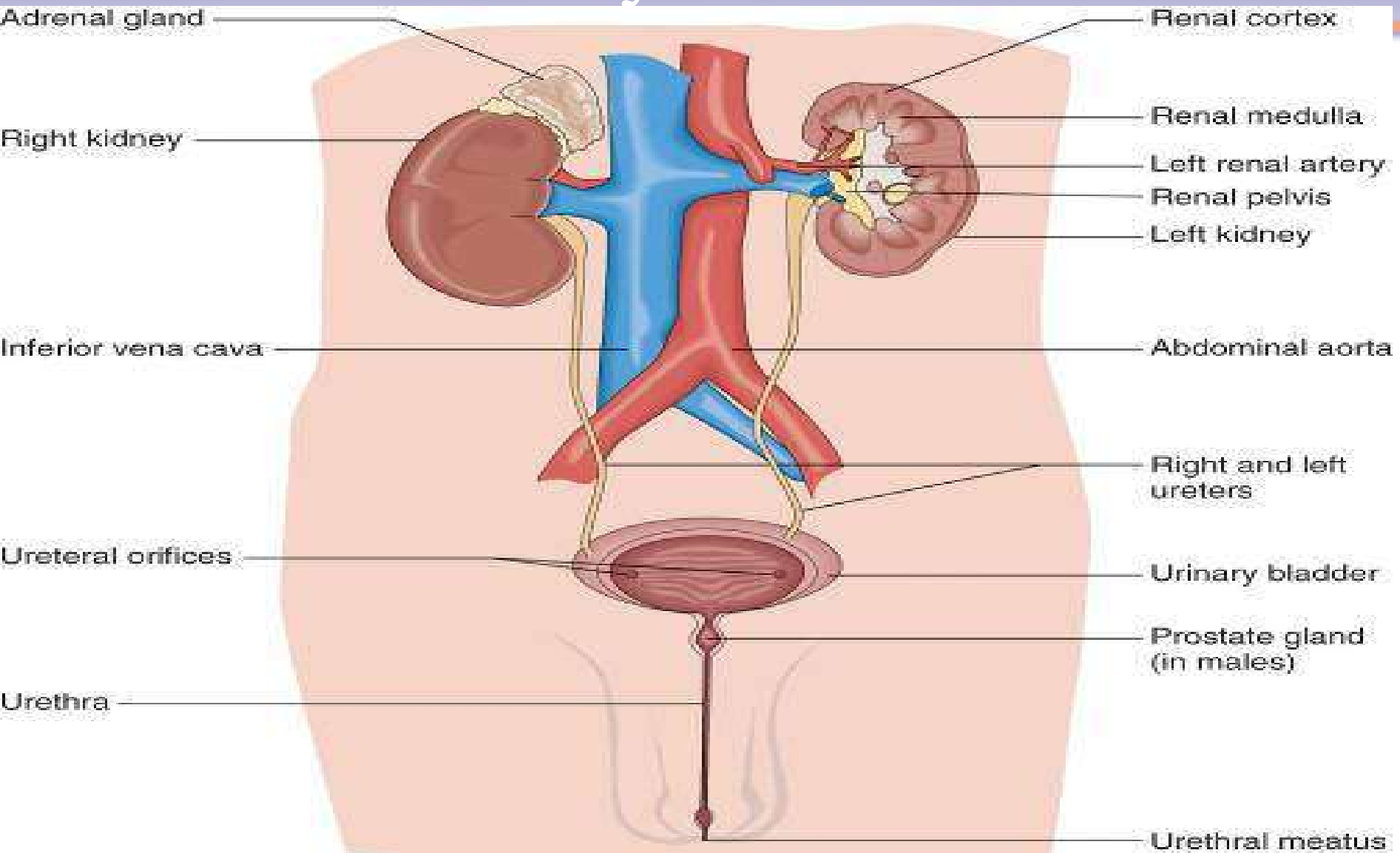


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Primary Structures of the Urinary System



Kidneys

- Primary Functions

- Filter the blood to remove waste products.
- Maintain electrolyte concentrations.
- Remove excess water to maintain the fluid volume within the body.

- Related Combining Forms

- nephr/o
- ren/o

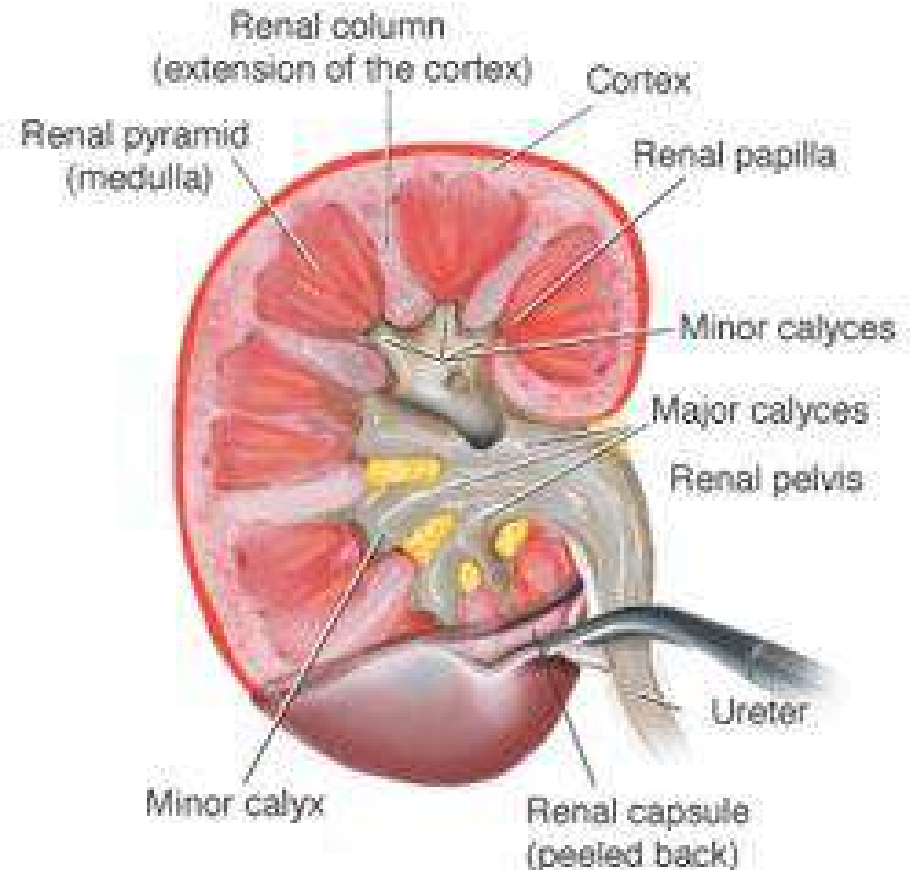


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Kidneys

- **Renal Pelvis** – two layers of the kidney
- **Renal Cortex** -contains the nephrons; outer layer
- **Nephrons** - functional units; form urine
- **Medulla** – inner layer; contains most of the urine-collecting tubes



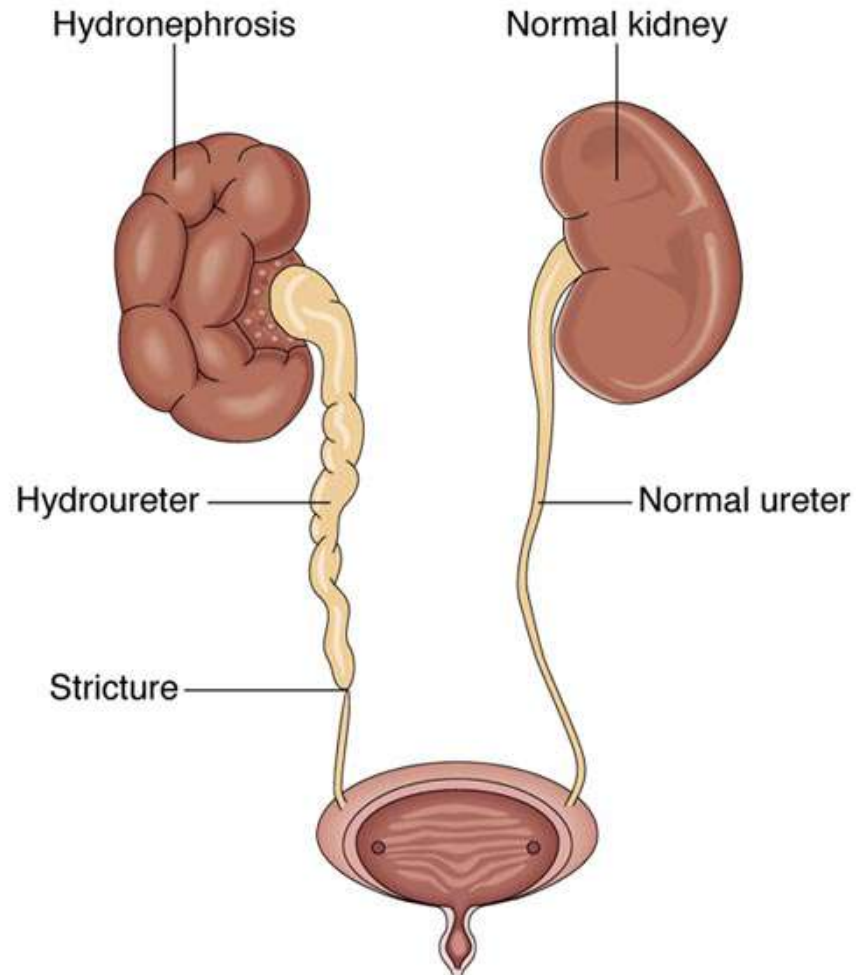
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The Kidneys

- **Hydronephrosis** — dilation of the renal pelvis due to the obstructions of flow
- **Nephritis** — Inflammation of the kidney
- **Pyelitis** — inflammation of renal pelvis
- **Pyelonephritis** — inflammation of the renal pelvis and kidneys
- **Renal colic** — pain caused by blockage of the kidney during a kidney stone



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Renal Failure

Also known as kidney failure

- Anuria – complete suppression of urine formation
- Uremia – toxic condition caused by too much urea and waste in the bloodstream
- Acute renal failure – sudden onset and is characterized uremia
- Chronic renal failure – progressive disease
- End-stage renal disease – refers to the late stages of chronic renal failure



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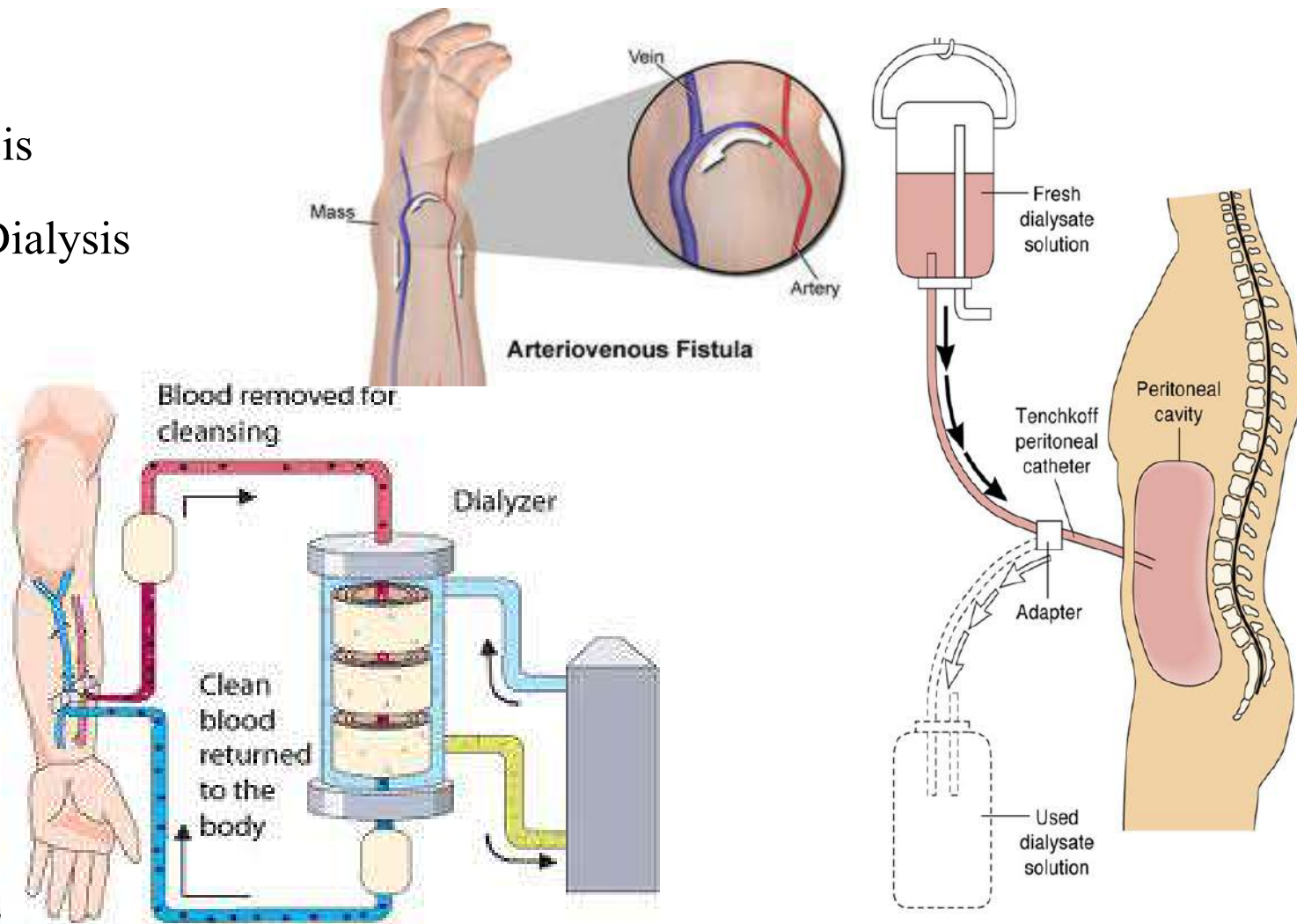
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Treatment Procedures

- Dialysis

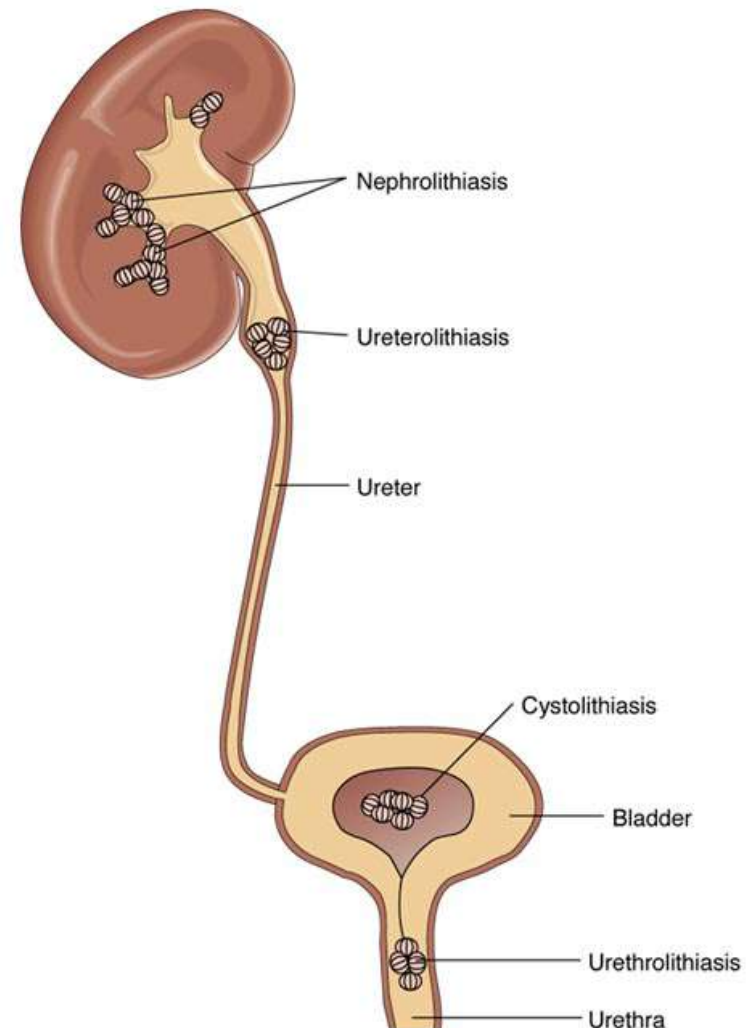
- Hemodialysis
- Peritoneal Dialysis



Stones

Also known as calculus

- Nephrolithiasis
- Cystolithiasis
- Ureterolithiasis



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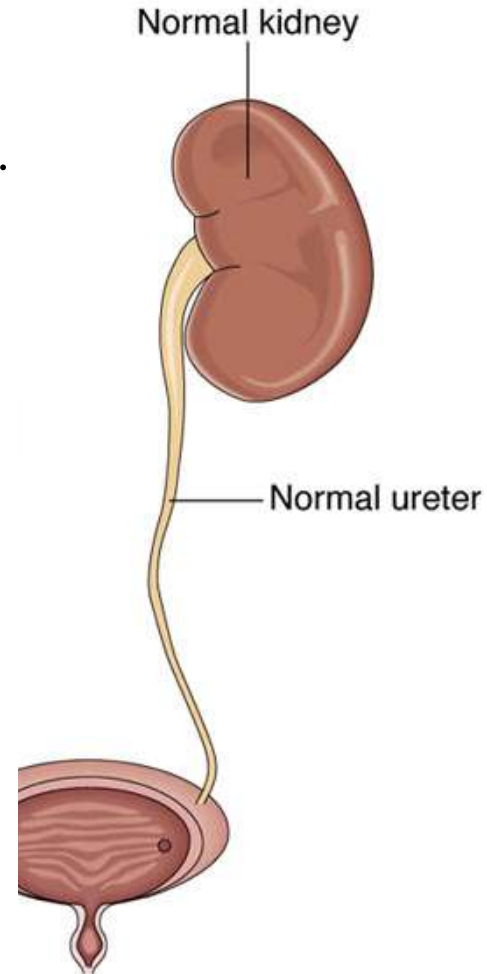
Treatment Procedures

- Transplant – kidney; remove and replace the kidneys from a donor
- Lithotripsy – destruction of the kidney stone through the use of ultrasonic waves
- Nephrolithotomy – surgical removal of kidney stones through a surgical incision



Ureters

- Primary Function
 - Transport urine from the kidneys to the bladder.
- Related Combining Form
 - ureter/o



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The Ureters

- Hydroureter – ureter fills with urine due to blockage
- Ureterectasis – distention of a ureter
- Ureterostenosis – narrowing of the ureter
- Reflux – flowing back



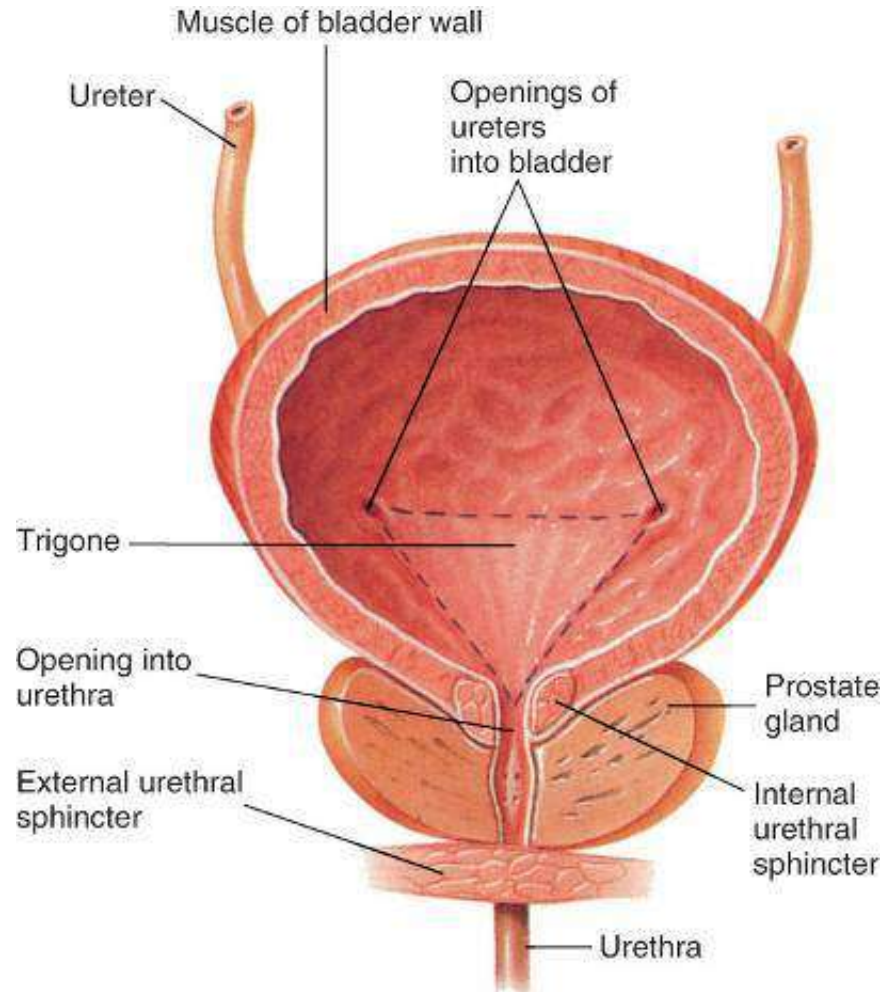
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Urinary Bladder

- Primary Function
 - Stores urine until it is excreted.
- Related Combining Form
 - cyst/o



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The Urinary Bladder

- Cystitis – inflammation of the bladder
- Cystocele – hernia in the bladder through the vaginal wall
- Urinary Tract Infection (UTI) – infection of the bladder/urethra
- Cystoscopy - visual examination of the urinary bladder



Urethra

- Primary Function

- Transports urine from the bladder through the urethral meatus, where it is excreted from the body.

- Related Combining Form

- urethr/o

- Related Terms

- Urinary sphincters – control the flow of urine out of the body
- Urethral meatus – external opening of the urethra



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Urine

- Primary Function
 - Liquid waste product produced by the kidney that is to be excreted.
- Related Combining Forms
 - ur/o, urin/o



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Urination

- Diuresis
 - Enuresis
 - Oliguria
 - Nocturia
 - Urinary Retention
 - Incontinence
 - Stress incontinence
 - Urge incontinence
- Polyuria
- Anuria

USE YOUR WORD PARTS

-uresis
-uria
Di-
En-
Noct/i –
An –
Olig/o –

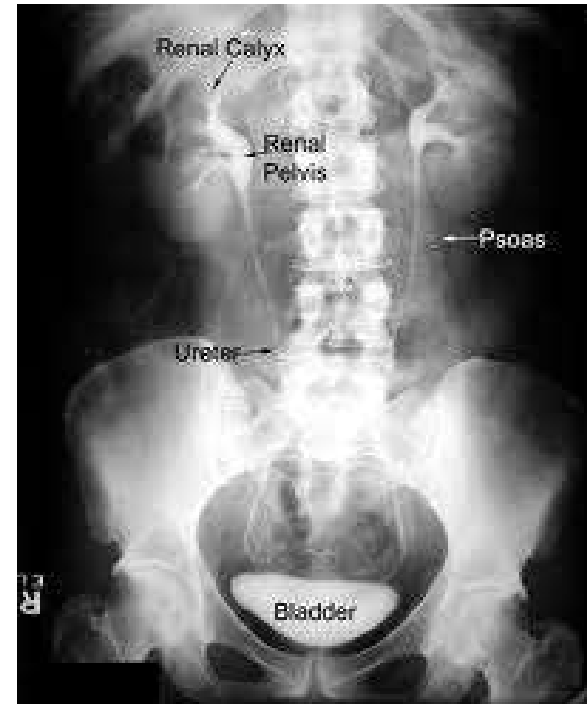


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Diagnostic Procedures

- KUB
- Intravenous Pyelogram (IVP)



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The End

Know your suffixes and
roots!!!!!!!!!!

Good word building skills go a long way!



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- a. ureter
- b. urine
- c. kidney
- d. urethra
- e. hernia in the bladder through the vaginal wall
- f. visual examination of the bladder
- g. infection of bladder/urethra
- h. inflammation of the bladder
- i. inflammation of the kidneys

