

Medical Terminology

Flashcard Study Guide

Chapter 28: The Urinary System

28 terms

Each card contains:

Term | Syllables | *Pronunciation* | Definition | 🌱 *Memory trick*

Chapter 28 — The Urinary System

Acute renal failure

a · cute re · nal fail · ure *ah-KYOOT REE-nul FAYL-yer*

A sudden and severe decrease in kidney function occurring over hours to days. The kidneys are unable to filter waste products from the blood. Can be caused by decreased blood flow, direct kidney damage, or obstruction. Often reversible with treatment.

🌱 *'Acute' = sudden and sharp. Acute renal failure = kidneys suddenly STOP working. Think of it as a kidney emergency — fast onset, needs fast treatment.*

Ascites

a · sci · tes *ah-SY-teez*

Abnormal accumulation of fluid in the peritoneal (abdominal) cavity, causing abdominal swelling. Often associated with liver disease, kidney failure, or heart failure.

🌱 *Ascites = a SITE of fluid buildup in the abdomen. Think of a water balloon filling up inside the belly.*

Chronic renal failure

chron · ic re · nal fail · ure *KRON-ik REE-nul FAYL-yer*

A gradual, progressive, and irreversible loss of kidney function over months to years. Eventually may require dialysis or a kidney transplant. Common causes include diabetes and hypertension.

🌱 *'Chronic' = long-lasting. Unlike acute (sudden), chronic renal failure is a slow decline — the kidneys gradually lose their ability to filter, like a drain slowly clogging over time.*

Cortex

cor · tex *KOR-teks*


The outer region of the kidney, located between the renal capsule and the medulla. It contains the glomeruli and portions of the nephron tubules where filtration begins.

🌱 *'Cortex' = outer layer (like tree bark). The renal cortex is the outer 'bark' of the kidney — where blood first gets filtered.*

Cystitis

cys · ti · tis *sis-TY-tis*


Inflammation of the urinary bladder, usually caused by a bacterial infection. Symptoms include painful urination (dysuria), urgency, frequency, and sometimes blood in the urine. More common in women.

 *'Cyst' = bladder + 'itis' = inflammation. Cystitis = inflamed bladder. The most common type of urinary tract infection (UTI).*

Dialysis

di · al · y · sis *dy-AL-ih-sis*

A medical procedure that artificially filters waste products and excess fluid from the blood when the kidneys can no longer do so. Two main types: hemodialysis (blood filtered through a machine) and peritoneal dialysis (fluid exchanged through the abdomen).

 *'Dia' = through + 'lysis' = separation. Dialysis = separating waste THROUGH a filter. It does the kidney's job when the kidneys can't.*

Dysuria

dys · u · ri · a *dis-YOO-ree-uh*

Painful or difficult urination. A common symptom of urinary tract infections, sexually transmitted infections, and other conditions affecting the urinary system.

 *'Dys' = painful/difficult + 'uria' = urine. Dysuria = it hurts to pee. DYSfunction of URInation.*

Enuresis

en · u · re · sis *en-yoo-REE-sis*

Involuntary urination, especially during sleep (bedwetting). Nocturnal enuresis is the most common form. Can occur in children or adults.

 *Enuresis = 'en-YOUR-esis' — urine escapes without your control. Think of it as the medical term for bedwetting.*

Frequency

fre · quen · cy *FREE-kwen-see*


The need to urinate more often than normal. A common symptom of urinary tract infections, overactive bladder, diabetes, and prostate problems.

 *Urinary frequency = FREQUENTly running to the bathroom. If you're going too often, that's frequency.*

Glomerulonephritis

glo · mer · u · lo · ne · phri · tis *gloh-MER-yoo-loh-neh-FRY-tis*

Inflammation of the glomeruli (tiny filters in the kidneys). Impairs the kidney's ability to filter blood, leading to blood and protein in the urine, swelling, and potentially kidney failure. Can be caused by infections or autoimmune diseases.

 *'Glomerulo' = glomerulus (kidney filter) + 'nephr' = kidney + 'itis' = inflammation. The kidney's tiny filters become inflamed and leak — like a coffee filter with holes in it.*

Hilum

hi · lum *HY-lum*

The indented area on the medial surface of the kidney where the renal artery, renal vein, nerves, and ureter enter and exit. It is the kidney's gateway or 'doorway.'

 *The hilum is the kidney's front door — everything important (blood vessels, ureter, nerves) enters and exits through this one spot.*

Incontinence

in · con · ti · nence *in-KON-tih-nens*


The inability to control urination, resulting in involuntary leakage of urine. Types include stress incontinence (from coughing or sneezing), urge incontinence (sudden strong need), and overflow incontinence.

 *'In' = not + 'continence' = ability to hold. INCONTInence = can't CONTain the urine. The bladder won't hold it in.*

Interstitial cystitis (IC)

in · ter · sti · tial cys · ti · tis *in-ter-STISH-ul sis-TY-tis*


A chronic condition causing bladder pressure, bladder pain, and sometimes pelvic pain. The bladder wall becomes irritated and inflamed without a bacterial infection. Also called painful bladder syndrome.

 *'Interstitial' = in the tissue/wall + 'cystitis' = bladder inflammation. IC is cystitis WITHOUT infection — the bladder wall itself is chronically inflamed and painful.*

Kidney

kid · ney *KID-nee*

One of a pair of bean-shaped organs located in the retroperitoneal space of the posterior abdominal wall. The kidneys filter blood, remove waste products, regulate fluid and electrolyte balance, and produce urine. Each kidney contains approximately one million nephrons.

 *You have two kidneys shaped like kidney beans — they are your body's blood-cleaning filters, processing about 200 quarts of blood daily.*

Kidney stones

kid · ney stones *KID-nee stonz*


Hard mineral and salt deposits that form inside the kidneys. Also called renal calculi or nephrolithiasis. Can cause severe pain (renal colic) when passing through the urinary tract. Treatment may include lithotripsy or surgical removal.

 *Kidney stones = literal STONES made of minerals that form in the kidney. Like tiny rocks stuck in the plumbing — extremely painful to pass.*

Lithotripsy

lith · o · trip · sy *LITH-oh-trip-see*

A medical procedure that uses shock waves or laser energy to break up kidney stones, gallstones, or other calculi into smaller fragments that can be passed in the urine. The most common type is extracorporeal shock wave lithotripsy (ESWL).

 *'Litho' = stone + 'tripsy' = crushing. Lithotripsy = CRUSHING STONES. The machine blasts the stones into tiny pieces so they can pass.*

Medulla

me · dul · la *meh-DUL-uh*


The inner region of the kidney, located beneath the cortex. It contains the renal pyramids and collecting ducts. Urine is concentrated as it passes through the medulla toward the renal pelvis.

 *'Medulla' = inner part. The renal medulla is the MIDDLE/inner zone of the kidney, where urine gets concentrated before draining out. Cortex = outer, Medulla = inner.*

Micturition

mic · tu · ri · tion *mik-too-RISH-un*

The act of urinating; the process of emptying the bladder. Also called voiding or urination. Controlled by both voluntary and involuntary nervous system signals.

 *Micturition = the fancy medical word for peeing. Think 'MIC-turition' — like turning on the MIC(rophone) to let the flow go.*

Nephrons

neph · rons *NEF-ronz*

The microscopic functional units of the kidney responsible for filtering blood and producing urine. Each kidney contains about one million nephrons. Each nephron consists of a glomerulus and a series of tubules.

 *'Neph'* = kidney + *'on'* = unit. Nephrons are the kidney's tiny workers — one million per kidney, each one filtering blood and making urine.

Polycystic kidney disease (PKD)

pol · y · cys · tic *pol-ee-SIS-tik KID-nee dih-ZEEZ*


A genetic disorder in which clusters of fluid-filled cysts develop in the kidneys, causing them to enlarge and gradually lose function. The most common inherited kidney disease.

 *'Poly'* = many + *'cystic'* = cysts. PKD = MANY CYSTS in the kidneys. The kidneys fill up with fluid-filled sacs like bubblewrap.

Pyelonephritis

py · e · lo · ne · phri · tis *PY-eh-loh-neh-FRY-tis*


An infection of the kidney and renal pelvis, usually resulting from a urinary tract infection that ascends from the bladder. Symptoms include fever, flank pain, nausea, and painful urination. More serious than simple cystitis.

 *'Pyelo'* = renal pelvis + *'neph'* = kidney + *'itis'* = inflammation. Pyelonephritis = the infection has climbed UP from the bladder to the kidney — it's a UTI that got promoted.

Renal calculi

re · nal cal · cu · li *REE-nul KAL-kyoo-lye*


The medical term for kidney stones. Hard deposits of minerals and salts that form in the kidneys. 'Calculi' is the plural of 'calculus,' meaning stone.

 *'Renal'* = kidney + *'calculi'* = stones. Renal calculi is the formal medical name for kidney stones. 'Calculi' comes from the same root as 'calcium' — hard mineral deposits.

Renal pelvis

re · nal pel · vis *REE-nul PEL-vis*


The funnel-shaped central collecting area in the kidney where urine drains before passing into the ureter. It receives urine from the major calyces.

 *The renal pelvis is the kidney's funnel — it collects all the urine and funnels it down into the ureter. Think of a PELVIS-shaped basin catching the urine.*

Ureters

u · re · ters *YOO-reh-terz*


Two narrow, muscular tubes that transport urine from the kidneys to the urinary bladder by peristalsis. Each ureter is approximately 10–12 inches long.

 *UretERS = the tubes that carry urine from kidnEy to bladdER. They are the highway connecting kidney to bladder. Remember: uretER = longER (longer tube from kidney).*

Urethra

u · re · thra *yoo-REE-thruh*

The tube that carries urine from the urinary bladder to the outside of the body. In males, it also serves as a passage for semen. The female urethra is shorter than the male urethra.

 *UrethrA = the finAl exit tube. Urine leaves the body through the urethrA. Remember: urethrA = shortA (shorter tube to the outside).*

Urinary bladder

u · ri · nar · y blad · der *YOO-rih-nair-ee BLAD-er*

A hollow, muscular organ in the pelvis that stores urine until it is ready to be excreted. It can hold approximately 300–500 mL of urine. The detrusor muscle contracts to expel urine during micturition.

 *The urinary bladder is your body's urine storage tank — a stretchy muscular bag that holds urine until you're ready to go.*

Urinary meatus

u · ri · nar · y me · a · tus *YOO-rih-nair-ee mee-AY-tus*

The external opening of the urethra through which urine exits the body. In females, it is located between the clitoris and the vaginal opening. In males, it is at the tip of the penis.

 *'Meatus' = opening or passage. The urinary meatus is the EXIT DOOR for urine — the very last opening where urine meets the outside world.*

Void

void *voyd*

To empty the bladder; to urinate. 'Voiding' is commonly used in medical charting to describe the act of urination. A voiding diary tracks urination patterns.

 *Void = to EMPTY. When you void, you empty your bladder. Think of 'voiding' a container — making it empty.*