

# Disorders of Kidney [DEPTH OF BIOLOGY]

1. Renal Calculi (Kidney stone) kidney stones also called renal calculi, nephrolithiasis or urolithiasis are the hard deposits of minerals and salts that form inside your kidneys. These are usually painful when passed.

2. Urinary Tract Infection UTI A urinary tract infection is infection in any part of your urinary system, which includes your kidneys, bladder, ureters and urethra.

In women the chances of getting UTI is high. It is usually caused when microbes enter tract and cause infection.

## 3. Glomerulonephritis [DEPTH OF BIOLOGY]

Inflammation of glomeruli present in nephron.

Glomerule → Glomeruli (tiny filters of kidney)  
nephri → nephron  
itis → inflammation.

Glomerulonephritis is the inflammation of tiny filters in kidney. It can be acute or chronic.

## 4. Diabetic Nephropathy [DEPTH OF BIOLOGY]

It is one of the three common complications caused due to type 1 and type 2 diabetes.

The 3 complications are — Neuropathy, Nephropathy, Retinopathy.

→ Due to the poor control on diabetes it can cause damage to blood vessel clusters in kidney that filter waste out of body. Since kidney's filter blood and removes



waste from blood.

This disease condition can lead to kidney damage and cause high BP. leads to kidney failure and patient needs Dialysis.

##### 5. Renal Failure [DEPTH OF BIOLOGY]

Refers to the kidney failure due to chronic damage to kidneys when they become unable to filter waste out of blood by their own.

In this kidney's become unable to balance fluids. Renal failure also called as kidney failure.

##### 6. Polycystic Kidney Disease (PKD) [DEPTH OF BIOLOGY]

It is an inherited disorder in which clusters of cysts develop in kidney's.

These cysts are the fluid filled sacs which are non cancerous and do not lead to cancer.

##### 7. Nephroblastoma (Wilm's tumor)

→ This disease is named after German surgeon Max Wilms

⇒ It is a malignant embryonal tumor which originates from nephrogenic blastema, this imitates the histology of developing kidney. [DEPTH OF BIOLOGY]

##### 8. Hydronephrosis

It is a disease condition which is characterised by excess fluid in a kidney due to the retention of urine in kidney. This is caused due to the blockage in the ureters. The usual causes are kidney stones, infection, enlarged prostate, a clot or tumour.



## [DEPTH OF BIOLOGY]

### Q. Urethritis

Urethra → urethra, itis → inflammation.

• It is the inflammation of urethra, which carries urine from the bladder to outside the body.

• It is a bacterial or viral infection causes swelling and irritation of urethra.

It is commonly caused by STI.

### Q. Urinary Bladder Cancer. [DEPTH OF BIOLOGY]

Also called as bladder carcinoma. It is cancer that begins in bladder.

It affects adults and usually gets diagnosed early and is treatable. It is likely to recur.