

# Kidney and urinary tract

#### Introduction:

The human body contains two fist-sized kidneys located near the middle back right under the rib cage. Inside each kidney, there is almost a million tiny structure called Nephrons. Nephrons filter blood and remove toxins and excessive water by turning it into urine, then the blood flows through pipes called the ureters reaching the bladder, where urine is stored until released by the person. Healthy kidneys also produce hormones that keep the bones strong and the blood healthy.

### **Kidney diseases:**

There are several causes that harm the kidney tissues leading to its inability to remove toxins or excess fluids from the body

# **Types of Kidney diseases:**

### A. Chronic Kidney diseases

A long-term condition where the kidney is unable to function normally, and its tissues are damaged slowly over several years

## B. Acute kidney failure

A sudden failure in Kidney functions causing its inability to filter blood toxins. Toxins accumulate rapidly in this case causing imbalance in the blood components, in a case that occurs very quickly within hours or days.

### Other kidney issues, including:

Cancer, cysts, stones and infections.



#### Causes:

- Genetic factors
- Diabetes
- Hypertension
- Immune infections
- Polycystic Kidney
- Use of medications that harm the kidney on the long run

### Acute kidney failure could be caused by:

- A problem that slows blood flow to the kidneys
- Direct damage in the kidney
- Blockage in the ureter, which hinders the discharge of toxins out of the body forming kidney stones or Enlarged prostate

#### **Risk factors:**

- Ageing
- Smoking
- Obesity
- Family history of kidney problems
- Hospitalization, especially cases that require ICU admission
- Diabetes
- Hypertension
- Heart failure
- Liver diseases

# **Clinical Health Education Department**

For more information, please contact us by email

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