

## **2. Chronic Kidney Disease**

Chronic Kidney Disease (CKD) means a condition that damages one's kidneys. It decreases kidneys' ability to keep one healthy by doing their functions.

CKD is a common, life-threatening illness that often goes undetected until very advanced. CKD may progress slowly over a long time. A lot of people are not aware that they have kidney disease until it's severe. If it's found and treated early, CKD may often be slowed down or stopped.

The risk factors for CKD include:

- Diabetes
- High blood pressure
- A family history of kidney disease, diabetes or high blood pressure
- Obesity
- Kidney stone
- Above 50 years old

Annual Health Screening is vital to check whether your kidneys are healthy.

You should visit your doctor or clinic and get tested. Your checkup should include:

- o Urine test for protein
  - Protein is an important building block in your body. Any filtered protein is normally reabsorbed and kept in your body. When your kidneys are damaged, however, protein leaks into your urine.
  - There are different tests to check for protein in your urine. If you have two positive tests over several weeks, you are said to have persistent protein in your urine. This is a sign of CKD.
- o Blood pressure
- o Blood test for glucose
- o Blood test for creatinine
  - Creatinine is a waste product that comes from muscle activity.
  - Your kidneys normally remove creatinine from your blood. When your kidneys are damaged, however, your blood creatinine may build to a high level.
  - The results of your test should be used to estimate your Glomerular Filtration Rate, or GFR. Your GFR tells how much kidney function you have.

### **2.1. Test results show CKD**

Your doctor will want to pinpoint your diagnosis and check your kidney function to help plan your treatment. The doctor may do the following:

- o Calculate your GFR, which is the best way to tell how much kidney function you have. You do not need to have another test to know your GFR. Your doctor can calculate it from your blood creatinine, your age, race and gender. Your GFR tells your doctor your stage of kidney disease and helps the doctor plan your treatment. (See the chart below on "5 Stages of Chronic Kidney Disease")

- Perform an ultrasound or CT scan to get a picture of your kidneys and urinary tract. This tells your doctor whether your kidneys are too large or too small, whether you have a problem like a kidney stone or tumor and whether there are any problems in the structure of your kidneys and urinary tract.
- Perform a kidney biopsy, which is done in some cases to check for a specific type of kidney disease, see how much kidney damage has occurred and help plan treatment. To do a biopsy, the doctor removes small pieces of kidney tissue and looks at them under a microscope.

Your doctor may also ask you to see a kidney specialist (nephrologist) who will consult on your case and help manage your case.

## 2.2. Five stages of Chronic Kidney Disease

Stage	Description	GFR Level mL/ min
At increased risk	Risk factors for kidney disease (e.g., diabetes, high blood pressure, family history, older age)	90 or more
1	Kidney damage with normal or higher GFR	90 or more
2	Kidney damage and mild decrease in GFR	60 to 89
3	Moderate decrease in GFR	30 to 59
4	Severe decrease in GFR	15 to 29
5	Kidney failure (dialysis or kidney transplant needed)	Less than 15

## 2.3. To prevent CKD progression

Early detection and treatment can often slow or stop CKD. How well your treatment can achieve this goal depends on:

- Your stage of CKD when you start treatment. The earlier you start, the better you are likely to do.
- How carefully you follow your treatment plan. Learn all you can about CKD and its treatment, and make sure to follow all the steps of your treatment faithfully.
- The cause of your kidney disease. Some kidney diseases are more difficult to control.