What is chronic kidney disease?



Chronic kidney disease occurs when your kidneys gradually lose the ability to filter waste from your blood. A buildup of waste in your blood can cause conditions such as:

- High blood pressure
- Low blood count (anemia)
- Weak bones
- Poor nutritional health
- Nerve damage

Kidney disease can also damage your heart and blood vessels. When the disease gets worse, it can lead to kidney failure. A person with kidney failure will need dialysis or a kidney transplant to live. Early detection and treatment are key to help keep chronic kidney disease from getting worse.

What are the main causes of chronic kidney disease?

Diabetes and high blood pressure are the major causes of chronic kidney disease.

Diabetes occurs when the sugar in your blood is too high. The condition can damage many organs in your body including the kidneys.

High blood pressure means the force of blood pushing against the artery walls is too high. If not controlled, high blood pressure can lead to chronic kidney disease. Also, chronic kidney disease can cause high blood pressure.

Other conditions that affect the kidney

There are a few other conditions or circumstances that can cause kidney disease.

Glomerulonephritis: This is a group of diseases that cause inflammation and damage the kidney's filtering units. These disorders are the third most common type of kidney disease.

Inherited diseases: Polycystic kidney disease is a common inherited disease that causes large cysts to form in the kidneys and damage the surrounding tissues.

Kidney and urinary tract abnormalities before birth: If narrowing of the urinary tract develops while a baby grows in the mother's womb, this may prevent normal outflow of urine and may cause it to flow back to the kidney when the baby is born. This causes infections and may damage the kidneys.

Autoimmune diseases: When the body's immune system turns against the body, it's called an autoimmune disease. Lupus nephritis is one type that results in inflammation (swelling or scarring) of the small blood vessels that filter wastes in the kidneys.



Chronic Kidney Disease

Other causes: Kidney stones or tumors that block proper function can damage the kidneys. An enlarged prostate gland in men or repeated urinary infections can also cause kidney damage.

What are the risk factors of chronic kidney disease?

Anyone can get chronic kidney disease at any age. However, you may be at increased risk if you:

- Have diabetes.
- Have high blood pressure.
- Have a family history of kidney failure.
- Are 65 years of age or older.
- Belong to an ethnic group with a high rate of diabetes or high blood pressure, such as African American, Hispanic, Asian, Pacific Islander, and American Indian.

What would I feel if something was wrong with my kidneys?

Most people don't have severe symptoms until their kidney disease is advanced. However, you may notice that you:

- Feel more tired and have less energy.
- Have trouble concentrating.
- Have a poor appetite.
- Have trouble sleeping.
- Have muscle cramping at night.
- Have swollen feet and ankles.
- Have puffiness around your eyes, especially in the morning.
- Have dry, itchy skin.
- Need to urinate more often, especially at night.

What will happen if my doctor thinks something is wrong with my kidneys?

Your doctor will check your kidney function and may order these blood and urine tests:

Albumin to creatine ratio urine test: Albumin is a protein that shouldn't be found in urine. It may indicate kidney function problems.

Blood test for creatinine: This determines if there is too much creatinine, a waste product, in the blood.

Glomerular filtration rate: The doctor will calculate your glomerular filtration rate using the results from the tests and other factors like age and gender. The result of the glomerular filtration rate is the best way to measure your level of kidney function and determine the stage of kidney disease.

Your doctor may order a CT scan to get a picture of your kidneys and urinary tract to look for physical or structural problems. Your doctor will also determine if your kidneys are too large or small and check for stones or a tumor.

They may also order a biopsy to check for a specific type of kidney disease, see how much damage has occurred, and develop a treatment plan.

References: kidney.org/atoz/content/about-chronic-kidney-disease

