# **Chronic Kidney Disease**

## >> Are You at Risk?

Being diagnosed with chronic kidney disease means you have some sort of kidney abnormality. Chronic kidney disease is a common condition that damages your kidneys and decreases their ability to keep you healthy. In fact, 26 million Americans have chronic kidney disease, and another 20 million are at an increased risk for it.

The kidneys are located on each side of your spine, at the bottom of the rib cage. Each of your two kidneys is about the size of a fist. The kidneys filter and return about 200 quarts of fluid into the bloodstream every 24 hours. About 2 quarts of fluid leave the body every day in the form of urine.

Five stages of chronic kidney disease have been identified. Each stage can increase the severity of the condition, eventually leading to kidney failure.

#### Why the Kidneys Are Important

A major function of the kidneys is to remove waste products and excess fluid from the body. The kidneys also perform the following important functions:

- remove drugs from the body
- balance the body's fluids (such as salt, potassium and acid content)
- release hormones that regulate blood pressure
- ${\boldsymbol{\cdot}}$  produce a form of vitamin D that promotes strong and healthy bones
- control the production of red blood cells.

#### **Risk Factors**

The two main risk factors for chronic kidney disease are diabetes and high blood pressure. Together, these two conditions are responsible for causing up to two-thirds of all cases of chronic kidney disease. Diabetes is the leading cause of kidney failure in the country — it accounts for about 45% of people who start treatment for kidney failure each year.

Other risk factors for chronic kidney disease include a family history of the disease and older age. In addition, blacks, Asians, Hispanics, Pacific Islanders and Native Americans are at higher-than-average risk for chronic kidney disease.

Some other conditions also affect the kidneys:

• glomerulonephritis, which causes inflammation in the kidney's filtering units

• inherited diseases such as polycystic kidney disease, which causes large cysts in the kidneys that damage surrounding tissue

- kidney stones, tumors or enlarged prostate gland in men, each of which can cause urinary obstruction of some degree
  - multiple urinary tract infections.

#### **Symptoms**

If you have chronic kidney disease, you may not have severe symptoms until the disease is advanced. But early in the disease, you may notice that you feel more tired and have less energy. You may have trouble thinking clearly or experience a poor appetite. You may have trouble sleeping or dry and itchy skin. You may have muscle cramps at night, swollen feet and ankles, and puffiness around your eyes (especially in the morning). You may also need to urinate more often, especially at night.

If your health care provider thinks you might have chronic kidney disease, there are three tests you'll take:

- blood pressure measurement
- urine test to measure for protein

• a creatinine blood test to calculate glomerular filtration rate, a measure of your kidney function.

### **Treatment Options**

Some types of chronic kidney disease can be treated successfully. But the exact causes of some types are unknown. For these forms, no specific treatments have been identified.

If you are diagnosed with chronic kidney disease, you'll need more tests to figure out the stage and type of the disease, the size of your kidneys and what type of damage has already been done. And after your disease has been diagnosed, one of the first things to do is to control problems such as diabetes and high blood pressure. This may require taking new medications.

Once your chronic kidney disease is under control, it's important to track your progress. This includes regular checks of glomerular filtration rate and checking for protein in your urine to make sure your kidneys are doing their job.

Chronic kidney disease can progress to kidney failure, which requires dialysis. Dialysis is a procedure that performs many of the functions of the kidneys when they fail. In some severe cases, a kidney transplant may be necessary. NP

Information is from the National Kidney Foundation, available at www.kidney.org.

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**Additional Notes:** 

