

KIDNEY DISEASE

Charity Kankam, M.D.

Cleveland Renal Associates, Ltd.

6701 Rockside Road #365

Independence, OH 44131

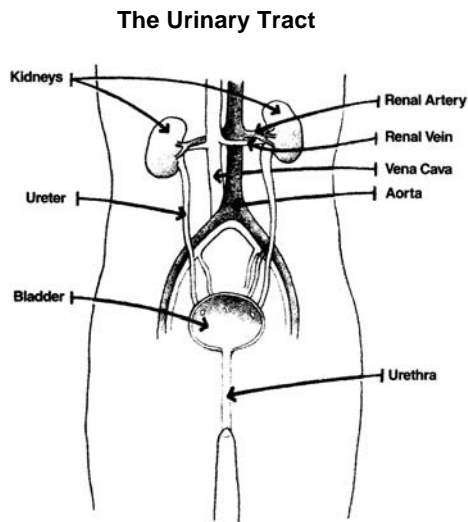
Phone Number: (216) 901-5706

Fax Number: (216) 901-6201

Staff Physician St. Vincent's Charity Hospital
Director-Cleveland Dialysis Centers (CDC) Cityview

Kidney disease is a major problem in the black community. 30% of patients on dialysis are black, while making up only 10-13% of the population.

Most people are born with two kidneys, occasionally one, rarely three. No matter the number, they work with similar efficiency initially. If the function of one kidney is lost (unless born with one kidney) the remaining kidney(s) can increase in size and take over the job of the lost kidney. The kidneys lie at the small of the back and have four important functions:



The purpose of the urinary tract is to clean the blood of waste products. Blood enters the kidneys through the renal artery. The kidneys filter the extra fluid and waste products, creating urine. The urine passes through the ureter into the bladder. The clean blood flows back to other parts of the body.

From Living with Kidney Disease: A Patient Manual,
The Tri-State Renal Network, 2nd Ed., 1991.

- 1) Rid the body of waste products;
- 2) Control the amount of fluids that stay in your body;
- 3) Control body chemistry including sodium, potassium, calcium, phosphorous and acids;
- 4) Release special chemicals called hormones into the blood stream that help control blood pressure, help make red blood cells, and maintain bone health.

If the kidneys are not working, one develops waste and water accumulation in the blood, loses control of body chemistry including sodium, potassium, etc., and develops high blood pressure, low blood count and poor bone health.

Failure of both kidneys leads to uremia (urea is a waste product of the body). Symptoms of uremia include weakness, fatigue, nausea, vomiting, itching skin, muscle cramps, joint pains, sleeplessness, and blurred vision. Your doctor will use CKD (Chronic Kidney Disease) stages to grade the level of kidney function left.

CKD Stage I: greater than 90% kidney function in individuals with risk for kidney disease

CKD Stage II: greater than 60% remaining

CKD Stage III: kidney function of between 30-60%

CKD Stage IV: between 15-30% of function

CKD Stage V: less than 15% left – labeled as ESRD (end stage renal disease)

At CKD Stage III, your primary doctor will refer you to a kidney specialist, a nephrologist. At this stage you will require special medications, diet, and education to prepare for possible dialysis or kidney transplantation.

Kidney failure can be acute renal failure (ARF) or chronic (CKD)

ARF is sudden and complete loss of kidney function. Causes include:

- ∞ Accidents
- ∞ Medicines, including over the counter medications (OTC)
- ∞ Serious infections
- ∞ Major surgeries
- ∞ Low blood pressure from blood loss, dehydration, shock and medications
- ∞ Blockage of bladder or kidney with stones
- ∞ Prostate enlargement

The kidneys will start working again in days to up to 6 weeks. Diet, medications, certain restrictions and sometimes dialysis is needed.

CKD (Chronic Kidney Disease) is caused by kidney failure due to decrease of function over a period of time. For the black community, the common causes are:

- ∞ Poorly controlled hypertension
- ∞ Diabetes Mellitus, hereditary but most often related to obesity from poor dietary habits and lack of exercise
- ∞ Substance abuse at all ages, including cigarettes, cocaine, heroin, and other risky behavior leading to HIV, Hepatitis, etc.
- ∞ Heart Disease that deprives the kidneys of much needed blood supply to work
- ∞ Hereditary diseases such as cysts of the kidneys
- ∞ Glomerulonephritis (inflammatory condition of the kidneys) which affects the filtering function of the kidneys
- ∞ Kidney infections, especially in children
- ∞ Blockage of kidneys from enlarged prostate, stones, etc.

When the kidneys stop working, the doctor will offer dialysis or transplant.

Treatment

Special diet (including restrictions)

Medications

Regular dialysis treatments

Transplantations

Medications

- a. To control blood pressure, diabetes, and heart disease
- b. Multivitamins to replace vitamins made by kidneys and missing from diet
- c. Phosphate binders to prevent bone disease caused by high phosph
- d. Calcium supplement and Vitamin D₃ to maintain bone health

- e. Iron and erythropoietin to prevent anemia

Avoid drugs not prescribed by your doctor, including OTC medications.

When you reach CKD IV, you will be educated about dialysis and or transplantation. At CKD V (ESRD), you will be placed on dialysis.

- a. Hemodialysis
- b. Peritoneal Dialysis
- c. Transplantation

.Community efforts to prevent kidney disease by aggressively managing high blood pressure, diabetes, obesity, drug abuse, and other risky behaviors is urgently needed. Collaboration between the medical community, community leaders, and the population at large is a **must**.