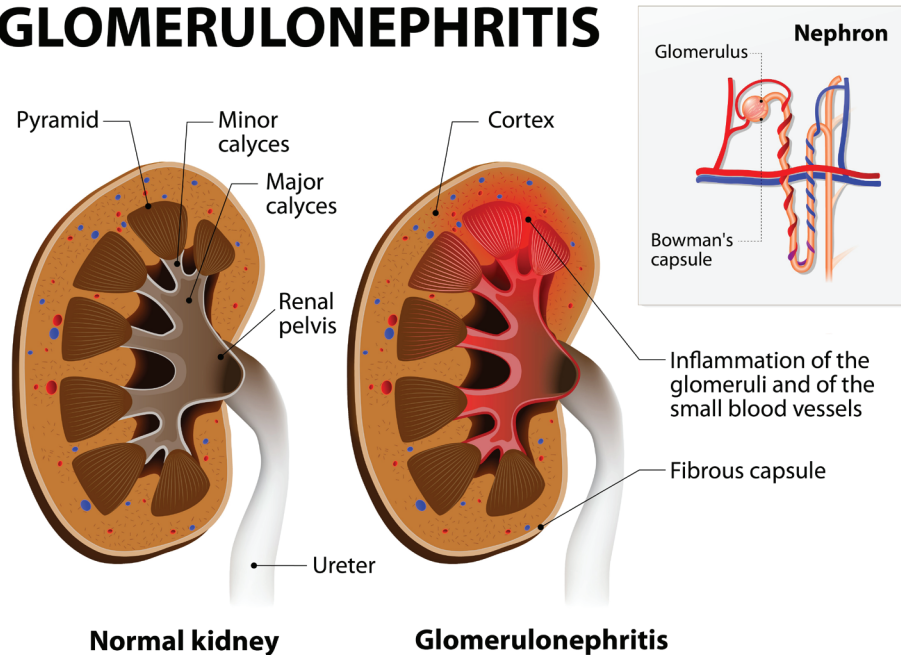


# Glomerular Disease and Chronic Kidney Disease

## What is Glomerular Disease?

- Glomerular disease consists of a variety of disorders that attack the tiny filtering units within your kidneys (or glomeruli) which that filter your blood.
  - While each of your kidneys has about 1 million glomeruli, over time glomerular diseases can damage these filters and lead to chronic kidney disease and eventually kidney failure.
- Glomerular disease interferes with your kidneys' ability to function properly and can cause your kidneys to "leak" items that it should be keeping in your blood stream, such as proteins.
- Glomerular disease can also cause your kidneys to decrease filtering out waste products, thus allowing waste and toxins to build up in your blood stream.

## GLOMERULONEPHRITIS



There are two main categories of glomerular disease based on the type of damage the disease causes to your glomeruli. Remember, glomeruli are the tiny filtering units that help your kidneys clean your blood.

- Glomerulonephritis (glo-mer-u-lo-ne-phri-tis)** is when there is inflammation of glomeruli in the kidney.
- Glomerulosclerosis (glo-mer-u-lo-scler-osis)** is the scarring or hardening of the tiny blood vessels within the kidney. Scarring to the glomeruli is permanent and cannot be repaired.

Both glomerulonephritis and glomerulosclerosis can cause kidney failure but most cases of these disorders can be managed & slowed to reduce the amount of damage to your kidneys.

## What are the Causes of Glomerular Disease?

Glomerular disease is most frequently caused by infections, drugs/medications or system/associated disease. However, some people have glomerular disease without a clear associated cause. Below are some of the common causes for glomerular disease.

- Diabetes
- Systemic Lupus Erythematosus (SLE)
- Goodpasture's Syndrome
- IgA nephropathy
- Hereditary Nephritis—Alport Syndrome
- Infection, particularly streptococcus (strep throat)
- HIV

# Glomerular Disease and Chronic Kidney Disease

## What are the Signs and Symptoms?

The symptoms of glomerular disease are very similar to the symptoms of other kidney diseases. Glomerular disease and many of the associated symptoms can only be diagnosed by a physician with blood and urine tests.

- Blood or protein in urine
- Frequent nighttime urination
- Bubbly or foamy urine
- Low blood protein
- Edema: swelling in parts of the body (frequently ankles or face)
- High blood pressure

## How is Glomerular Disease Diagnosed?

Glomerular disease is initially diagnosed by your physician through urine and blood tests.

- **Urinalysis**
  - A urinalysis allows your physician to measure critical substances/cells in your urine, such as protein or red and white blood cells.
- **Laboratory studies**
  - A blood test allows your physician to look at the levels of waste products, such as creatinine and blood urea nitrogen (BUN). This helps your physician understand if the filtering capabilities of your kidneys have been damaged.
- **Other tests**
  - In addition to the tests mentioned above, your physicians may also order a kidney ultrasound, x-ray or a kidney biopsy to help them better understand your kidneys and assist them in making a diagnosis

## What is the Treatment for Glomerular Disease?

Treatment depends on the type of glomerular disease and the causation of that disease. If you have been diagnosed with any form of glomerular disease, you will work closely with your kidney doctor and health care team to develop a treatment plan specific for you.

Some treatment options may include:

- Lifestyle changes
  - Healthy lifestyle changes and/or medication can slow your progression of kidney failure.
  - For example, those with glomerular disease caused by diabetic nephropathy, lifestyle changes (healthy eating with moderate protein intake, physical activity) and medication can make a big difference in slowing damage to their kidneys.

### Sources:

<https://www.niddk.nih.gov/health-information/kidney-disease/glomerular-diseases>

<https://www.kidney.org/atoz/content/glomerul>

<https://www.kidney.org/atoz/content/focal>

*This content is for informational purposes only and is not a substitute for medical advice or treatment. Consult your physician regarding your specific diagnosis, treatment, diet and health questions. If you are experiencing urgent medical conditions, call 9-1-1.*