

## What should I expect with having Focal Segmental Glomerulosclerosis? Will I develop kidney failure?

Your clinical course is highly dependent on the underlying cause of the FSGS and how you respond to therapy. In the secondary, genetic and adaptive forms of FSGS, progression to kidney failure is variable. In the primary form of FSGS, 40-50% of patients do not respond to immunosuppressive treatment and may progress to kidney failure requiring dialysis and/or kidney transplantation. Enrollment in a clinical trial is encouraged. Your doctor will also discuss the risk of primary FSGS recurring after kidney transplantation. This risk is often high in those with primary FSGS but unlikely for genetic, secondary and adaptive forms.

**From Diagnosis  
to Management,  
We Are By  
Your Side.**



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## Focal Segmental Glomerulosclerosis



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## What is Focal Segmental Glomerulosclerosis (FSGS)?

Focal segmental glomerulosclerosis (FSGS) is characterized by scarring of glomeruli, the tiny filters in the kidneys that help remove waste and excess fluids from the blood. This scarring ultimately results in the leakage of protein into the urine and progressive loss of kidney function.

## What are the causes of FSGS?

There are many causes of FSGS. Some of the leading causes are:

- **Primary FSGS:** This is due to an overactive immune system.
- **Genetic FSGS:** This is due to a genetic cause. Several genetic mutations have been linked to FSGS.
- **Secondary FSGS:** This is either due to certain medications or viral infections.
- **Adaptive FSGS:** This is due to diabetes, high blood pressure, obesity, birth defects in the kidney, or sickle cell anemia.

## Who is at risk for FSGS?

Depending on the cause, FSGS can be seen in men and women of all ages and ethnicities. Children and young patients are more likely to have primary and genetic forms of FSGS, whereas older patients are more likely to have the secondary and adaptive forms of FSGS.

## What are the signs and symptoms of Focal Segmental Glomerulosclerosis?

- Protein in the urine.
- Swelling in different parts of the body, such as the legs and face.
- Weight gain from extra fluid in the body.
- Increased cholesterol levels.
- High blood pressure.
- Abnormal kidney function test.
- Fatigue.

## How is Focal Segmental Glomerulosclerosis diagnosed?

Your doctor will start with blood and urine tests. FSGS is a pattern of injury to the kidney filters observed on a kidney biopsy. A kidney biopsy is a procedure where a doctor takes a small sample of kidney tissue using a needle and study the sample under a microscope. Your doctor will put these findings together with your clinical presentation and lab tests to identify the underlying cause of FSGS. Genetic testing can be utilized in select cases.

## What is the treatment for Focal Segmental Glomerulosclerosis?

Treatment for FSGS is dependent on the underlying cause of the disease. For the primary form of FSGS, treatment involves medications that weaken the immune system. For the genetic forms, we do not yet have targeted gene therapy. For the secondary or adaptive forms, treatment is usually directed at the underlying cause.



For any form of FSGS, your doctor will likely give you medications to control your blood pressure, reduce the amount of protein leaking into the urine, reduce swelling (using water pills) and maintain your cholesterol level. Your doctor will also advise you to maintain a healthy lifestyle, follow a low-salt diet, quit smoking and exercise regularly.