Focal Segmental Glomerulosclerosis (FSGS)

OVERVIEW AND SYMPTOMS

Focal Segmental Glomerulosclerosis (FSGS) is a rare disease characterized by scarring in the part of the kidney that filters blood (glomeruli). Only some glomeruli are affected, but the damage can lead to kidney failure. The only way to differentiate FSGS from other primary Nephrotic Syndrome (NS) conditions is to have a kidney biopsy. Early symptoms of FSGS are the same as NS:

- **Proteinuria** - Large amounts of protein ‘spilling’ into the urine
- **Edema** - Swelling in parts of the body, most noticeable around the eyes, hands, and feet that can become painful
- **Hypertension** - High blood pressure
- **Hypoproteinemia** - Low blood protein
- **Hypercholesterolemia** - High level of cholesterol

Each person has two kidneys in their lower back. The kidneys continuously filter blood and produce urine to remove waste products, salts and excess fluid. Each kidney is made up of approximately one million filters called “glomeruli.” Just as a coffee filter keeps coffee grounds in, glomeruli keep valuable cells and protein in the blood.

CAUSES

FSGS often occurs without a known cause. These cases are called **idiopathic** or **primary** FSGS. Secondary FSGS cases can be the result of diabetes, lupus or some other known cause. NephCure Kidney International supports research to help researchers learn more about the causes of primary FSGS.

Learn more at [www.nephcure.org](http://www.nephcure.org) or call 1-866-NEPHCURE
FACTS

- FSGS occurs more frequently in adults than in children and is most prevalent in adults 45 years or older.

- 2-4 out of every 100,000 children are diagnosed with NS each year; FSGS is associated with 15-20% of these cases.

- FSGS is the most common cause of steroid resistant Nephrotic Syndrome in children and the second leading cause of kidney failure in children.

- FSGS-affected males are 1.5 to 2 times more likely to progress to end stage renal disease (ESRD) than FSGS-affected females.

- FSGS is the most common primary NS disease in African American patients (50-57% of primary NS cases) and African Americans have a higher rate of progression to end stage kidney disease (requiring dialysis or transplant) than other FSGS patients.

- A high percentage of patients with FSGS do not respond to steroids, and other treatment options used to control proteinuria may carry significant side effects.

- FSGS can recur in 30-40% of patients who receive a kidney transplant.

TREATMENTS

Your nephrologist may recommend:

- Steroids (prednisone or prednisolone) as first line therapy to reduce inflammation and control proteinuria.
- Diuretics and low salt diet to help control edema.
- A medication that blocks a hormone system called the renin angiotensin system (e.g. ACE inhibitors or ARBs) to control blood pressure and lower urine protein.
- Anticoagulants to prevent blood clots.
- Statins to lower the cholesterol level.
- Maintaining a healthy diet: proper amounts of protein and fluid intake according to your nephrologist's recommendations.
- Exercising.
- Not smoking.
- Vitamins.

For information about research seeking the cause and better treatments for NS or to learn about patient education opportunities, please contact us at: research@nephcure.org.