# Nephrotic Syndrome

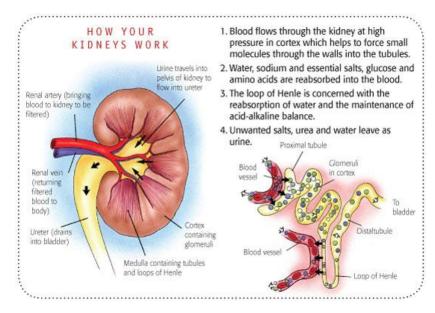
## **OVERVIEW AND SYMPTOMS**

Nephrotic Syndrome (NS) is a collection of signs and symptoms that occur when glomeruli leak protein into the urine. Some symptoms of NS include:

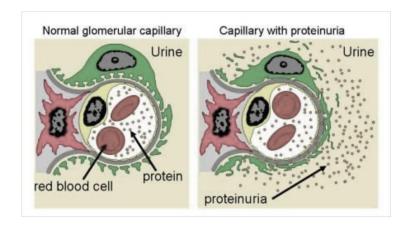
- <u>Proteinuria</u>- Large amounts of protein 'spilling' into the urine
- <u>Edema</u>- Swelling in parts of the body, most noticeable around the eyes, hands, and feet that can become painful
- <u>Hypertension</u>- Increased blood pressure
- Hypoproteinemia- Low blood protein
- <u>Hypercholestrolemia</u> High level of cholesterol

## **CAUSES**

Some of the diseases that cause NS occur only in the kidney. These include Minimal Change Disease (MCD), Focal Segmental Glomerulosclerosis (FSGS), and Membranous Nephropathy (MN). These diseases are called "idiopathic" or "primary" because they occur without a known cause. Researchers are actively trying to learn more. Sometimes, diseases that occur in another part of the body can also cause NS. These include diabetes, cancer, lupus, amyloidosis, infection, drugs, allergies and vasculitis.



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.





### **FACTS**

- Although primary NS is a relatively rare condition, anyone can get it. NS is one of the most common contributors of Chronic Kidney Disease (CKD) and responsible for 12% of kidney failure in adults and 20% in children.
- 2-4 out of every 100,000 children are diagnosed with primary NS each year in North America and the rates are higher in some other countries.
- Adult incidence of primary NS each year is 3 out of every 100,000 individuals.
- Males are more likely to be diagnosed with NS than females.
- FSGS is the most common primary NS disease in African American patients (50-57% of African American NS diagnoses).
- MN is the most common primary NS disease in adult Caucasian patients.

#### **TREATMENTS**

Your nephrologist may recommend:

- Medications that suppress your immune system (e.g., Prednisone)
- Diuretics and low salt diet to help control edema
- A medication that blocks a hormone system called the renin-angiotensinaldosterone hormonal system (e.g., ACE inhibitors, ARBs) to control blood pressure and lower urine protein
- Anticoagulants to prevent blood clots
- Statins to lower the cholesterol level
- Maintaining a healthy diet: Correct amounts of protein and fluid intake according to your nephrologists' recommendations
- Moderate exercise
- Not smoking
- Vitamins

