

Chronic Progressive Nephrosis: A Common Kidney Disease

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Older rats are commonly affected by a kidney disease called Chronic Progressive Nephrosis.

What is Chronic Progressive Nephrosis?

Chronic Progressive Nephrosis is a non-infectious disease of the kidneys in rats, and is age-related. "Chronic" means it is ongoing; "Progressive" means it steadily gets worse; and "Nephropathy" is the term for disease of the kidneys.

Which rats are at risk for Chronic Progressive Nephrosis?

This disease affects older rats, and is usually more severe and may occur earlier in males. The incidence in males is reduced if they are castrated. Sprague-Dawley rats are often affected earlier in life. Rats that are fed high-protein diets are at higher risk of developing this disease. Certain chemicals can increase the severity of the disease.

What are the signs of Chronic Progressive Nephrosis?

Rats with Chronic Progressive Nephrosis often show a chronic loss of weight, become inactive, and may have rough hair coats. They may produce more urine than normal rats. The major laboratory finding is a great increase of protein, mostly albumin, in the urine. The amount of albumin present correlates with the degree of kidney disease, i.e.; the higher the albumin, the worse the disease. The kidneys are enlarged and pale and have a pitted appearance.

What is the treatment for Chronic Progressive Nephrosis?

Rats with this disease need to be fed diets low in protein. Feeding soybean protein (versus protein from other sources) and limiting calories will reduce the severity of the disease, and may help prevent it. Rats with Chronic Progressive Nephrosis may also be treated with anabolic steroids.