

Chronic Kidney Disease in Cats

Chronic kidney disease is seen in cats when the kidneys lose their ability to eliminate waste products, maintain normal hydration, and produce specific hormones. Chronic kidney disease takes weeks to months to develop and is irreversible. This disease cannot be cured, but the symptoms can be controlled and often managed successfully with medical treatment for months to years.

The kidney is made up of many small functional units called nephrons. In order for chronic kidney failure to occur and be recognized 2/3rd of these nephrons need to be damaged. This is the reason for the insidious onset that takes many weeks to months to be recognized. Due to the slow onset and the fact it is recognized late in the course of the disease an underlying cause is usually not identified.

It is important to recognize chronic kidney disease as early as possible to begin treatment to slow the progression and more adequately manage the disease. Signs to look for in your cat include increased drinking and urinations as these are often the first clinical sign noted by owners. This is due to the kidneys inability to concentrate urine. Signs non-specific to kidney failure include lethargy, vomiting, depression, and weight loss. Signs more specific to kidney disease are inappetence, vomiting, diarrhea, oral ulcers, uremic (foul smelling) breath, and constipation. These signs occur due to the build up of toxic materials in the blood and tissue from waste products that the kidneys are incapable of eliminating.

Loss of function of the kidney also leads to anemia. This is caused by the inability of the kidneys to form erythropoietin which is the hormone responsible for stimulating red blood cell production. Anemia will add to the lethargy, weakness, and loss of appetite. Hypertension (high blood pressure) is also seen in chronic kidney disease and may cause sudden blindness or stroke like signs (sudden behavioral changes, seizures), as well as damage to the heart.

Chronic kidney disease is diagnosed by evaluating your cats blood and urine. The blood is evaluated for waste products that are usually eliminated by the kidneys. These waste products are blood urea nitrogen (BUN) and creatinine. Only the kidney eliminates these products so when they are elevated they indicate decreased renal function. The blood is also evaluated for anemia and electrolyte imbalances. Your cats blood pressure will be measured and the amount of protein in the urine evaluated. X-rays and ultrasound can also be done to evaluate kidney size and appearance.

Once a diagnosis is made, treatment will be started. For most cats a good quality of life can be provided for months to years with medical treatment. This includes a kidney friendly diet, hydration therapy, and medications to control vomiting, inappetence, electrolyte imbalances, anemia, proteinuria, and hypertension. A kidney diet is low in protein and salt because the metabolism of protein produces the waste products that become retained by the kidney when the function is reduced. Dehydration becomes a problem in cats because they lose the ability to concentrate their urine. So your pet should have constant access to fresh, clean water. They may need to supplement with subcutaneous fluid administration which can be done at home.

It is important to have regular follow-up examinations by your veterinarian for successful medical management of chronic renal failure. Any change in kidney function and treatment needs have to be evaluated on a regular basis.