



Chronic Kidney Disease



Chronic kidney disease, also known as chronic renal failure, is one of the most common age-related conditions seen in senior cats. Unlike *acute* kidney failure, which comes on suddenly and is usually caused by poisoning or ingestion of toxic substances (i.e. lilies or antifreeze) *chronic* kidney failure is a slowly progressive disease in which kidney function declines unnoticed over months or even years before signs appear. In most cases, the initiating event is unknown. Chronic kidney disease occurs very frequently and cats may show early signs of kidney damage at 10 to 14 years of age.

The damage to the kidneys is irreversible, but supportive treatment can improve your cat's quality of life and slow down the progression of the disease.

In healthy cats, the kidneys act to filter and excrete the body's toxic waste products. The kidneys concentrate and eliminate waste products in urine and return water and salts to the body to maintain normal hydration and electrolyte balance. In most cases of chronic kidney disease, the kidneys simply "wear out" as part of the aging

process and are no longer able to efficiently filter waste products from the blood. Because the kidneys cannot adequately concentrate urine, your cat may produce large quantities of very dilute urine. In response to this increased fluid loss, your cat will need to drink more and more water to maintain adequate hydration. Also, as the kidneys become less able to filter out normal body toxins, waste products build up in the bloodstream and can cause clinical signs such as vomiting and depression. Most animals do not show signs of kidney disease until about 70-75% of kidney function has been lost.

In general, the most common clinical signs of chronic kidney disease are:

- ✓ Increased thirst (*polydipsia*) and increased urination (*polyuria*)
- ✓ Weight loss
- ✓ Vomiting and loss of appetite
- ✓ Weakness
- ✓ Poor haircoat
- ✓ Constipation
- ✓ Bad breath and ulcers in the mouth

Chronic kidney disease is diagnosed by:

- ✓ A thorough physical examination by your veterinarian.
- ✓ Blood tests to determine the levels of two waste products, blood urea nitrogen (BUN) and creatinine, which are normally excreted in the urine.
- ✓ Urinalysis to measure your cat's urine specific gravity (concentration of the urine).

With aggressive treatment, many cats can live months or years after a diagnosis of chronic kidney disease,



Wholistic Paws Veterinary Services, LLC

Acupuncture, Rehabilitation, Hospice, and Euthanasia services in the comfort and dignity of your home.

but others may not respond as well to therapy.

Initially, your cat may need to be hospitalized to undergo *diuresis*, a procedure during which large quantities of intravenous fluids are administered over 2 to 5 days to flush out the kidneys in an attempt to restore as much kidney function as possible. If that is successful, chronic therapy focuses on maintaining water balance and controlling complications such as high blood pressure (hypertension), anemia, constipation, and vomiting.

Your veterinarian may recommend an appropriate prescription diet with restricted protein and low phosphorous content. In general, canned food is better for cats with chronic kidney disease. Adequate water intake is also essential. You'll need to monitor the amount of food and water your cat consumes each day.

Many patients benefit from the administration of fluids under the skin. Subcutaneous (Sub-Q) fluids dramatically increase hydration and help to keep the kidneys functioning as well as possible. Your clinic's veterinary technician will teach you how to administer Sub-Q fluids to your cat. Although it sounds difficult, most owners find the technique easy to perform, and most cats will tolerate it well.

Hypertension is a common and dangerous complication of chronic kidney disease. Blood pressure should be monitored in all cats with kidney disease to help prevent further damage to the kidneys. Left untreated, high

blood pressure speeds up the progression of the kidney failure and can also damage the eyes, causing sudden blindness. Medications may be necessary to maintain normal blood pressure.

Traditional Chinese Veterinary Medicine can also be employed to help support your cat's overall health and kidney function. Acupuncture and Chinese herbs can help to control signs of kidney disease (i.e. vomiting and constipation) and can help to support the kidneys and delay the progression of disease. This can help to decrease the need for additional medications and prolong your cat's good quality of life.

The success of your cat's treatment for chronic kidney disease depends in large part on you. Your commitment to carefully following your veterinarian's instructions on diet, medications, and supportive home care will reward both you and your cat with improved quality of life and, possibly, even a few extra golden years together!