

Chronic Renal Failure in Cats and Dogs

A brief guide on disease progression including end-of-life symptoms

Common Signs of Pain

- Panting
- Lameness
- Difficulty sleeping
- Pacing
- Abnormal posture
- Body tensing
- Poor grooming habits
- Tucked tail
- Dilated pupils
- Licking sore spot
- Muscle atrophy
- Decreased appetite
- Vocalizing/yowling
- Reclusive behavior
- Aggressive behavior
- Avoiding stairs/jumping
- Depressed
- Unable to stand

Before your pet's condition becomes unmanageable or they are losing quality of life, it is important to begin end-of-life care discussions. Learn about pet hospice care and/or euthanasia services in your area so you are prepared for what lies ahead.

What is it?

Chronic Renal Failure (CRF) is the gradual loss of function of the kidneys. The kidneys are responsible for excreting many naturally occurring waste products, so when they begin to fail there is a build-up of substances such as blood urea nitrogen (BUN), creatinine, and phosphorus. An excess of these products is what makes the animal feel ill. A build-up of these substances can cause oral and gastric ulcers, making the animal feel even worse and decreases their desire to eat. It is also common to see hypertension (increased blood pressure) in these animals. In addition, the kidneys produce a hormone known as erythropoietin that is responsible for communicating with the bone marrow to make new red blood cells. When the kidneys fail this hormone decreases and in turn decreases the production of new red blood cells, causing the animal to become anemic. Studies show that 80% of kidney tissue is irreversible damaged before clinical signs present and the disease is found in blood workups.

How is it treated?

The goals of treatment are to support the kidneys and medically assist them to complete the tasks that they are meant to do. The first priority is to place the animal on a low protein, low phosphorus diet in order to reduce the amount of BUN and phosphorus build-up in the body. There are several kidney diets on the market that are made especially for CRF. Administration of fluids under the skin (subcutaneous fluids) can be done at home daily or a few times a week, depending on the severity of disease. This is done to flush out the build-up of toxins and to keep the animal hydrated. Removal of excess phosphorus is also important, so an oral dosage of phosphate binders (aluminum hydroxide) is recommended, if necessary. There are also pharmaceuticals available to help treat the oral and gastric ulcerations and hypertension. If the pet becomes anemic, it may be necessary to administer a blood transfusion or give erythropoietin, injected under the skin, in order to stimulate the production of new red blood cells.

What is the prognosis for renal failure?

Many animals that are diagnosed with chronic renal failure go on to live many more great years, if they are managed appropriately. However, with any disease there are some animals that do not respond positively to treatment and remain ill and their condition quickly worsens. It is important to have your animals checked regularly by a veterinarian so that renal function can be assessed and any changes in the kidneys can be addressed immediately. A personalized treatment plan is important to slow the progression of kidney disease. Talk to your veterinarian regarding the best treatment protocol for your pet.

What symptoms can present as the disease progresses?

EARLY STAGES:

- Increased urination
- Increased drinking – sitting near the water bowl
- Weight loss
- Decreased grooming behavior
- Dehydration
- Incontinence or inappropriate urination
- Changes in haircoat – dry, flakey
- Unusually bad breath

**If your pet vocalizes due to pain or anxiety, please consult with your tending veterinarian immediately.*

LATE STAGES:

- Persistent early stages
- Oral ulcerations
- Reclusive behavior
- Decreased water intake and urination
- Vomiting
- Anorexia
- Severe weight loss
- Sunken eyes
- Staggering
- Stiff gait
- Continued incontinence
- Vocalizing
- Dementia
- Unable to rise

CRISIS:

- Immediate veterinary assistance needed regardless of the disease*
- Difficulty breathing
 - Prolonged seizures
 - Uncontrollable vomiting/diarrhea
 - Sudden collapse
 - Profuse bleeding – internal or external
 - Crying/whining from pain*