

Dog Tips

Cat Tips

This Slow Progression of Dying Is Often Masked Till It's Too Late

Symptoms of this fatal disease progress so slowly they're often missed till acute blindness, seizures, and coma set in. A leading cause of death in kitties, these 5 breeds of dogs are also susceptible. What to be alert for, best treatment and more.

Analysis by Dr. Karen Shaw Becker

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STORY AT-A-GLANCE

- Chronic kidney disease (CKD) is damage to a pet's kidneys that has been present for months to years
- There are many potential causes of CKD, including malformation of the kidneys, bacterial infection, high blood pressure, and certain drugs and diseases. CKD is much more common in cats than dogs
- Symptoms of CKD include increased thirst and urination (or in some cases, decreased urination), vomiting, and gradual, consistent weight loss
- Fluid therapy forms the basis of the treatment protocol for patients with kidney failure. Preventing
 dehydration and keeping the animal well-nourished are essential in managing the disease and maintaining
 quality of life

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Your pet's kidneys are very important organs. They regulate your dog's or cat's blood pressure, blood sugar, blood volume, water composition in the blood, and pH levels. The kidneys also produce a variety of hormones, including erythropoietin, that stimulates red blood production.

As blood flows through your pet's kidneys, they filter out waste products generated from the break down of food, old cells and metabolic byproducts, toxins or poisons, and many drugs. The wastes are removed when your dog or cat urinates.

The kidneys also act as filters to insure beneficial substances like proteins get into the bloodstream, and they help regulate calcium and vitamin D levels.

Chronic Kidney Disease

Chronic kidney disease, or CKD, is damage to a dog's or cat's kidneys that has been present for months to years. It's also called chronic renal disease (CRD), chronic renal failure (CRF), and chronic renal insufficiency.

Dogs and cats of any age can develop chronic kidney failure, but it's more commonly seen in older pets.

Kidney failure often happens so gradually that by the time the symptoms become obvious, it's really too late to treat the problem effectively. The kidneys find amazing ways to compensate as they slowly lose function over a period of months to years, which is why obvious symptoms often don't appear until very late in the disease process.

Causes of Kidney Disease in Pets

There are many different causes of kidney disease in dogs and cats, including congenital (at birth) malformation of the kidneys, chronic bacterial infection of the kidneys, high blood pressure, urinary blockage, certain drugs, diabetes, lymphoma (a type of cancer), and immune-mediated disease.

An episode of acute kidney disease, for example, from a poisoning that permanently damages an animal's kidneys can lead to the chronic form of kidney disease as well. Often, no cause can be determined for a dog's or cat's kidney problems.

Dog breeds prone to chronic kidney failure include the Samoyed, Bull Terrier, Cairn Terrier, German Shepherd, and English Cocker Spaniel. Abyssinian and Persian cats are also more prone to CKD than other breeds, but in general, cats are much more prone to chronic kidney disease than dogs, in fact, it's a leading cause of death in kitties.

Symptoms of CKD

Symptoms of chronic kidney failure typically occur gradually over a long period of time and can include the following:

- Vomiting
- Decreased urination
- Lethargy
- Blood in the urine
- Diarrhea or constipation
- Anorexia
- Depression
- Acute blindness
- Gradual, consistent weight loss
- Seizures
- Increased thirst and urination
- Coma

Less common signs include oral ulcerations and bruising, weakened bones that can result in spontaneous fractures, itchy skin from calcium and phosphorus depositing in the skin, and bleeding into the stomach or gut.

Diagnosing Kidney Disease

Your veterinarian will need to run a complete blood profile that includes a chemical blood profile, complete blood count (CBC), and urinalysis.

Pets with chronic renal failure may have anemia, abnormal electrolyte levels, abnormal or elevated blood pressure readings, and abnormally high levels of creatinine and blood urea nitrogen (BUN).

One of the primary indicators of CKD is dilute urine (the urinalysis will show low specific gravity), which means the kidneys aren't capable of recycling water normally.

Other tests may include x-rays or ultrasound imaging to check the size and shape of the kidneys for obvious abnormalities. Small kidney size is another indicator of CKD.

The severity of CKD can be estimated based on blood waste production levels and abnormalities in the urine, such as the presence of protein. A method exists to estimate the stages of CKD, which are numbered 1 through 4, where 1 is the least severe and 4 is the most severe. The higher the stage number, typically the greater number of symptoms seen in the pet, but that's not always the case.

Occasionally, especially when the kidneys are enlarged instead of abnormally small, a kidney biopsy may be performed to look for a definitive explanation for why the kidneys aren't functioning normally.

If your pet's illness is caused by some factor other than damaged kidneys, for example, a disease that decreases blood flow to the kidneys or a urinary tract obstruction, it's possible the problem with the kidneys can be reversed with appropriate treatment of the underlying disease.

Treatment Options

If your pet's kidney disease is the result of irreversible kidney damage, in many cases renal function will stabilize for weeks or even months at a time. The disease will continue to progress and kidney function will continue to deteriorate, but your pet's symptoms can be minimized with supportive treatment.

Fluid therapy is the cornerstone of treatment for animals with kidney failure, primarily to prevent dehydration. Subcutaneous (under the skin) fluid delivery may be necessary, and many pet owners can learn to do this at home. In fact, we train clients all the time to give fluids at home so they can reduce stress on their pet and avoid extra visits to the veterinarian.

Potassium is often added to the fluids or the animal's diet to safeguard against muscle weakness and heart rhythm disturbances that can result from low electrolyte levels. In some cases, intravenous (IV) fluids may also be necessary.

Your dog or cat should have round-the-clock access to fresh, clean (chlorine and fluoride free) water. Withholding water, for example overnight, will not solve your pet's need to urinate in the middle of the night and can actually cause significant additional stress on the kidneys.

You'll need to keep careful track of the amount of food and water your pet consumes each day. If consumption decreases, additional fluids may need to be administered to prevent dehydration. You should also weigh your pet at least weekly to insure she's getting enough calories to maintain her weight and proper hydration.

The food you feed a pet with chronic kidney failure is also critically important for disease management and overall well-being. I advocate an organic, fresh food diet for animals with kidney dysfunction. A reduced amount of high-quality, human-grade protein is essential, as is eliminating all dry foods, which can exacerbate your pet's dehydration.

Feeding a high-moisture, reduced phosphorus diet is crucial in managing your dog's or cat's kidney disease.
An integrative or holistic veterinarian is your best resource for advice on the right supplements and medications as necessary, as well as other therapies that can help sustain your pet's health and quality of life.