



Chronic Kidney Disease (CKD)

Chronic Kidney Disease (CKD) is the name used now to refer to cats with kidney failure. Chronic kidney disease is a common disease in older cats. It is normally a condition which progressively worsens over time, and whilst we cannot cure chronic kidney disease in cats, we can do lots of things to keep our cats as healthy and happy as possible, for as long as possible.

What do the kidneys do?

The kidneys have more than one job to do, so when cats have kidney disease, the effects can be quite wide ranging.

When there is kidney disease, vets often see excessive drinking and urination as too much water is lost from the body, anaemia (low red blood cell count), and also a build-up of waste products in the blood. This build-up of waste products, along with abnormal electrolytes (blood salts) can then have effects on other body organs and systems.

What causes kidney disease?

In the majority of cases, a vet will not be able to tell the owner exactly what caused the kidney disease in the cat. In biopsies of cats with chronic kidney disease, vets often find 'chronic interstitial nephritis', a term which describes scarring and inflammation within the kidney. Nearly every kidney at the end of its 'working life' will look the same on biopsy, so kidney biopsies rarely tell the vet what caused the damage to the kidneys originally.

What are the signs of kidney disease?

The kidneys do multiple jobs, so there are multiple signs when they aren't functioning properly. These signs are not just specific to kidney disease. Common signs include:

- Increased urination and increased drinking
- Weight loss
- Poor appetite
- Lethargy - appearing more tired than usual, disinterested in normal activities.

Other signs may include vomiting, constipation, halitosis (bad breath), anaemia, poor coat quality and ulcers in the mouth. Most of the signs of kidney disease are vague and non-specific, but they may provide the first clues that the cat is unwell.

How is kidney disease diagnosed?

Usually a blood test and a urine sample are required to make a diagnosis of kidney disease. There is a type of plastic cat litter available to take urine samples at home, as it is non-absorbent. If this is not possible, sometimes we can take a sample directly from the bladder with a needle at the surgery. This procedure is called cystocentesis and is usually well tolerated by cats.

The blood test is performed at the surgery; a sample of a small amount of blood is taken, usually from the jugular vein in the neck, and ran using the in-house laboratory at the surgery. Results are usually same day.

What is the staging of kidney disease and why is this important?

For the cat with kidney disease it is useful to stage the severity of the disease, to help with monitoring, treatment decisions and prognosis. The International Renal Interest Society (IRIS) has devised a staging system which categorises the severity of stable kidney disease based on blood creatinine levels, urine proteinuria (protein levels in the urine), and a measurement of blood pressure.

How can we treat and manage kidney disease?

The treatment for kidney disease is aimed at keeping the cat's condition as stable as possible and trying to achieve a good quality of life for them. It is important to remember that damage to the kidneys cannot be reversed, and that chronic kidney disease will worsen with time. However, some of the treatment and management steps can make a real difference to the cat's quality and length of life.

1. Diet

A cat with chronic renal failure who is fed a renal prescription diet will live on average more than twice as long as a cat with chronic renal failure who is fed normal cat food.

2. Water Intake

The failing kidney is unable to concentrate urine, so it's important to encourage the cat with chronic kidney disease to drink more.

3. Controlling blood pressure

Cats with chronic kidney disease are at a higher risk of developing high blood pressure, or systemic hypertension. High blood pressure is often 'silent', with no outward noticeable signs, so regular checks can help pick up on the condition, and treat it appropriately, as soon as possible.

4. Treating Anaemia

Cats with chronic kidney disease are at risk of becoming anaemic, which is defined as having low levels of red blood cells. This is due to a couple of reasons. Normal healthy kidneys produce a hormone which stimulates red blood cell production in the bone marrow. The ailing kidney may produce less of this hormone and so less red blood cells are produced, contributing to anaemia.

5. Treating nausea and vomiting

Medications can be prescribed which can help control vomiting and nausea. These symptoms of chronic kidney disease can affect a cat's quality of life, and lead to poor appetite and weight loss. Helping to control vomiting and nausea can make a cat with kidney disease feel a lot brighter.

6. Phosphate binders

Sometimes despite being on a prescription renal diet, which is restricted in dietary phosphate, some cats with chronic kidney disease will still show high phosphate levels on blood tests. In these cases, a 'phosphate binder', usually a powder, can be added to food to try and reduce the amount of phosphate the body retains. Vets will closely monitor this phosphate binders with blood tests.

7. Potassium supplementation

The kidneys have an important role in regulating electrolytes (blood salts). Cats with chronic kidney disease can lose too much potassium in their urine. Low levels of potassium in the blood can cause muscle weakness and inappetence, as well as worsening the kidney disease. If low levels of potassium are identified, potassium supplementation may be added, in the form of either powders, gels or liquids to be given on food.

What is the prognosis for a cat with kidney disease?

The prognosis for the cat with chronic kidney disease is highly variable. The IRIS staging system (discussed above) can give an initial assessment of how advanced the chronic kidney disease is at the time of diagnosis, but the disease will progress more quickly through the stages in some cats than others. Chronic kidney disease is always progressive, so it will always get worse over time, but this may vary from weeks to months to years.

Lanes Vets Locations & Contact Information.

Lanes Vets Garstang Leachfield Industrial Estate, Green Lane West, Garstang, Lancashire PR3 1PR.	Telephone. 01995 603 349 Email: garstang@lanesvets.com
Lanes Vets Lancaster Units 4 - 5 Lake Enterprise Court, Ladies Walk, Caton Road, Lancaster LA1 3NX.	Telephone. 01524 67777 Email: lancaster@lanesvets.com
Lanes Vets Poulton 235 Garstang Road East, Poulton-le-Fylde, Lancashire FY6 8JH.	Telephone. 01253 891 088 Email: poulton@lanesvets.com

The information contained within this factsheet and the Lanes Vets website is provided by qualified, practicing professionals in good faith. The information is not intended to replace the advice of your own veterinarian nor should persons use this information as a basis for diagnosis of any animal(s).