



Chronic Kidney Disease

A common complaint we treat cats for at the clinic is long term or chronic kidney disease (CKD) and its associated complications. It is often a disease we see in older cats but sometimes younger cats can be affected too.

Like us, cats have two kidneys which lie in the abdomen on either side of the spine. The kidneys are comprised of millions of functional units called 'nephrons' and clinical signs of kidney (renal) dysfunction may not be apparent until a significant number of nephrons have been destroyed (as many as 75% in most cases). Like any chronic disease, identifying it in the earlier stages is more likely to result in a better quality of life for your cat.

So, what do the kidneys do? They provide a vital role in the body's water and electrolyte (salt) balance and, of course, they produce and concentrate urine for excretion. The kidneys also help regulate blood pressure and produce a hormone to stimulate the production of red blood cells. Because of the vital role the kidneys play in your cat's body, anything which damages them can be very serious. The range of things that can cause damage is vast, from external factors like toxins, through to inherited problems, infection, cancer or, simply the ageing process.

When the kidneys stop working, toxic waste products will no longer be filtered effectively and will, therefore, build up in the body. This can cause numerous problems. Your cat will be unable to control its internal water balance and electrolyte levels will be upset too. The inability to control blood pressure may result in hypertension (high blood pressure) and the hormone which stimulates red blood cell production will be lost, leading to anaemia.

So, what are the signs you can look out for in your cat? Well there are a number of symptoms and some of them are rather vague but include weight loss, inappetence, vomiting, diarrhoea, excessive drinking and lethargy. As these symptoms can point to a range of conditions, we would need to take a blood sample to confirm kidney disease. Urine testing in conjunction with blood testing will allow us to confirm a diagnosis of kidney disease. If there is an underlying cause of kidney problems, sometimes these can be treated leading to a resolution of kidney function. Unfortunately though, kidney disease is usually due to the degeneration of ageing and the problem cannot be cured. Nonetheless, there is much that can be done to relieve the unpleasant symptoms your cat may be experiencing and improve the quality of their life.

By feeding a prescription diet low in phosphorous and protein, we can reduce the toxic overload of the by-products created when these elements of your cat's diet are metabolised. Equally, there are medications which bind to the phosphorus in the food, preventing its absorption in the first place, so that again not so much of it is having to be broken down by the (already struggling) kidneys. Some cats may need help with regaining their appetites and warming the food may assist with this. Any dietary change is more likely to be accepted if the transition from the old diet to the new one is done gradually. Your vet needs to assist with this and it important to not start feeding the low phosphorus/low protein diet unless CKD has been properly diagnosed by your vet.

It is very important that we work to increase the blood flow through the kidneys and there are drugs we can use to help us achieve this. It is essential that we work to relieve and treat any associated side effects your cat may be experiencing from their kidney dysfunction. We can offer gastro-



protectants to reduce and/or neutralise stomach acid in order to alleviate abdominal discomfort, where appropriate. These may help with vomiting and feelings of nausea, and can be combined with anti-sickness drugs. We may need to treat any secondary high blood pressure too, or to supplement potassium, or address anaemia. Each cat will need treatment according to his or her individual needs.

It would be untrue to say that kidney disease is not a serious problem for cats, but improved quality of life and survival *can* be achieved with diligent treatment. Symptoms can be alleviated to help your cat feel better and to give them the best possible quality of life. As already mentioned, early diagnosis and subsequent intervention is the key, so if you are at all concerned, please contact your vet.