



Chronic Kidney Disease in Cats

1 in 3 geriatric cats develop kidney disease

What does the kidney do?

- Maintains fluid balance in the body.
- Excretes waste products (via urine).
- Produces certain hormones.
- Regulates any electrolytes.

Causes

There are many causes of kidney disease including cancer, infection, toxic injury, kidney stones and congenital problems. The list goes on. However, the most common cause of kidney disease in geriatric cats is 'idiopathic chronic interstitial nephritis'. This is where the kidney undergoes a long-term path of injury so that the remaining functional part of the kidney is gradually reduced. The kidney has a huge reserve; 75% of the kidney's function must be lost before the cat will experience signs of disease. This is an age-related disease and unfortunately it is largely unknown why they are predisposed to it.

Clinical Signs

- Dull and lethargic.
- Blindness.
- Increased thirst.
- Smelly breath.
- Sickness/diarrhoea/constipation.
- Loss of coat condition.
- Dehydration.
- Pale nose/gums/eyes (Anaemia).
- Increased urination.
- Loss of appetite.
- Weight loss.

Diagnosis

A basic diagnosis of kidney disease is readily made from the symptoms, a blood test and a urine test. There are further tests that allow a more thorough investigation and your vet will guide you through the need for these, an example would be an ultrasound of the kidney.



Treatment

Treatment depends on the stage of kidney disease. There are four stages of kidney disease between 1 (mild) and 4 (severe).

- Treat any underlying causes, for example, an infection.
- Kidney diet: The most important component of treatment. A kidney diet is vital to improve quality of life and life expectancy. It aims to balance electrolyte disturbances, contains added vitamins and antioxidants and has an increase calorific density as kidney patients are often in poor body condition.
- Correct dehydration: Increase water intake at home, or by using intravenous fluids at the vets. The method employed will vary with the severity of the dehydration.
- Blood pressure medication: Many cats will also require medication to reduce their blood pressure.
- Phosphate binder/additional correction of electrolyte abnormalities.
- ACE inhibitors/blockers: This medication is in the form of a tablet/liquid and aims to reduce the blood pressure within the kidney and therefore the protein that is abnormally lost into the urine.
- Appetite stimulants/stomach protectants if the cat suffers from a reduced appetite and nausea.
- Hormone therapy for anaemia: controversial and not widely available.
- Kidney transplant, although it is not currently legal in the UK as the British Veterinary Association questions the ethical and welfare implications.

Remember, each cat must be treated as an individual. The treatments above must be discussed with your vet to devise an appropriate treatment plan. Often, only a kidney diet and maintaining a healthy fluid intake is required.

Managing the change to a new diet

This is one of the most important things you do when treating a cat with kidney disease. The food is relatively unpalatable when compared to a normal diet and they may reject the food making management of the disease very difficult. Please follow the steps below to increase your chances of success.

1. Change gradually (days to weeks).
2. Start by mixing a very small amount of the new food with your cat's old food, and mix well!
3. Only increase the amount once your cat is happy.
4. Warm to body temperature to increase palatability by increasing the odour.
5. If necessary, talk to your vet about using appetite stimulants and anti-sickness medication to increase their appetite in order to make the transition easier.

Increasing water intake

1. Place numerous water bowls in quiet, secluded locations. Often we place water in the kitchen, the busiest place in the house. This can put cats off going to drink.
2. Move the water bowl away from the food bowl. It is thought that cats may consider water next to their food to be contaminated. This goes back to the fact that cats are hunters and the instinct remains strong.
3. It is also known that cats prefer glass or ceramic bowls in comparison to plastic or metal. This could be that plastic taints the taste of the water.
4. Water fountains are inexpensive to purchase and will provide running water. These are a very popular water source to increase drinking.



5. Sometimes the water can be flavoured slightly by making a homemade chicken stock. This can be achieved after a family roast. Simply place the chicken carcass into a large pan of boiling water for an hour or so. The remaining water will be chicken flavoured and can be added to their water that week or frozen into ice cubes and kept long term. Some cats will play with them floating in the water as they dissolve and it makes the water taste nice! It is important, however, not to season the chicken with any salt, pepper or flavourings... I'm afraid the flavouring of your roast chicken will have to be done on your plate!

Blood pressure

1 in 5 cats with chronic kidney disease have high blood pressure. Ideally, all patients should have their blood pressure monitored. This may involve a day/morning patient stay at the vets, some cats will be suitable for monitoring in the consultation room if they are particularly calm. They will be left to settle and recover from the car journey and then we will take several measurements to provide an average blood pressure reading. If they have hypertension it should be treated because it can cause; blindness, seizures, heart problems, neurological signs, poor quality of life and cause the kidney disease to worsen.

Monitoring

Ongoing monitoring is extremely important. The frequency with which it will be necessary will vary according to the individual but most will visit every 3-6 months.

- Blood values.
- Urine protein quantity (urine sent to laboratory).
- Urinary tract infections are more likely in those with kidney disease (urine to laboratory).
- Blood pressure (20% or 1 in 5 suffer from hypertension).
- Other diseases must be monitored for as this is a disease seen in older cats and therefore comorbidity is common.

Prognosis

This can vary from a few weeks post diagnosis to many years of life. Average life expectancy if optimal treatment and monitoring achieved is as follows:

Stage 1: variable

Stage 2: 3 years

Stage 3: 1.8 years



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Stage 4: 35 days