



Best friends



154 Worcester Road
Malvern, Worcestershire
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Understanding Kidney Disease - a guide for pet owners

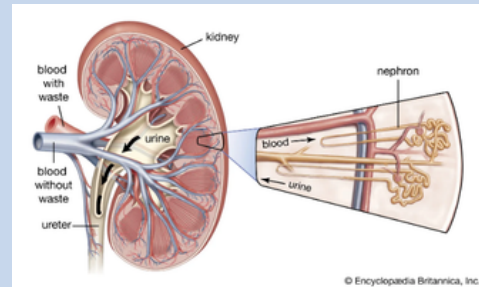
What is Kidney Disease?

Kidney disease, also known as renal disease, is a common condition, especially as our pets get older. The kidneys play a vital role in filtering waste products and excess fluids from the blood, regulating blood pressure, and maintaining electrolyte balance. When the kidneys are damaged and can no longer perform these functions efficiently, your pet may develop a range of health problems.

Chronic kidney disease - This is a gradual-onset, long-term disease of the kidneys caused by the natural ageing process and is often seen in pets over seven years of age.

Acute kidney disease - This is usually as a result sudden serious kidney damage e.g., trauma, poisoning, infections, or blockages caused by lower urinary tract disease. Despite treatment, a pet with acute kidney disease may later go on to suffer from chronic kidney disease.

How Kidneys Work...



Healthy Kidney function

1. Blood is filtered in the kidneys by nephrons (the workers)
2. Nephrons filter the substances into..
 - Those to be returned to the bloodstream (Recycled)
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Kidney with impaired function

1. Chronic renal dysfunction is caused by a reduced number of functioning nephrons.
2. More water and proteins are eliminated as kidney function declines.
3. Unwanted waste accumulates in the bloodstream.

Common Causes of Kidney Disease

- Ageing
- Genetic predisposition
- Infections (such as leptospirosis)
- Exposure to toxic substances (e.g., antifreeze, certain medications, plants)
- Underlying health conditions (high blood pressure, autoimmune diseases)

Signs and Symptoms

Early signs of kidney disease can be subtle. If you notice any of the following, consult your vet:

- Increased thirst and urination
- Loss of appetite
- Weight loss
- Lethargy or weakness
- Vomiting or diarrhoea
- Bad breath (often with a chemical smell)
- Ulcers in the mouth or pale gums





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How is Kidney Disease Diagnosed?

Excessively high levels of waste products in blood and urine show the kidneys are not functioning properly. High blood pressure is a common feature of kidney disease. Further diagnostic tests include radiographs and ultrasound scans of the kidneys to see if the kidneys are abnormal in size or structure.

What follow-up care is needed?

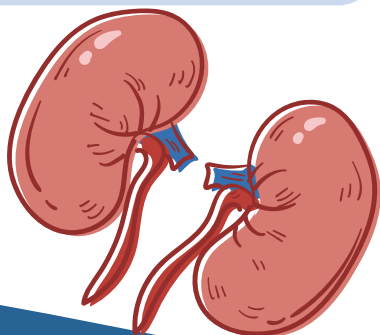
Blood tests to monitor response to treatment – This lets us know at what stage of the disease your pet's kidneys are. We can advise different treatments depending on the severity of kidney failure.

Blood pressure monitoring – High blood pressure causes the filtering of toxins by the kidneys to worsen and can be easily treated if it develops.

Urine analysis – Protein loss in urine is a common result of kidney disease. If this happens, treatment can be adjusted to avoid weight loss and anaemia.

Blood Pressure

Increased blood pressure, or hypertension, is a common complication of chronic kidney disease (CKD) in dogs, and the two conditions often go hand-in-hand. Damaged kidneys can lead to fluid and electrolyte imbalances, which raises blood pressure. This can worsen the kidney disease and cause organ damage, particularly to the eyes, brain, and heart. Vets manage this through regular blood pressure monitoring, specific medications to lower pressure, and a special renal diet.



How is Kidney Disease Managed?

- **Diet:** Special prescription diets low in protein, phosphorus, and sodium can help manage symptoms and slow progression.
- **Medications:** Medicines may be prescribed to control blood pressure, treat anaemia, or address nausea and vomiting.
- **Fluid therapy:** Some may require extra fluids to prevent dehydration.
- **Treating underlying causes:** Infections or blockages may need targeted treatment.
- **Regular check-ups:** Ongoing monitoring is essential to adapt treatment as the condition progresses.

Prevention Tips

- Ensure your pet has fresh water at all times
- Avoid exposure to toxins (e.g., antifreeze, human medications, toxic plants)
- Keep up with vaccinations, especially for diseases like leptospirosis
- Schedule regular vet check-ups, especially for older animals

How kidney Disease Causes High Blood pressure

- **Fluid and electrolyte imbalances:** Damaged kidneys have trouble regulating the body's fluids and electrolytes, which can increase blood pressure.
- **Hormonal changes:** The kidneys produce hormones that help regulate blood pressure. When they are damaged, these hormones may not be produced correctly.
- **Vascular changes:** Chronic kidney disease can lead to endothelial dysfunction, which is an imbalance in the natural relaxation and constriction of blood vessels. Supporting Your Pet

With early detection and proper management, many dogs and cats with kidney disease can still enjoy a good quality of life. Work closely with your vet to tailor a care plan that meets your pet's specific needs, and provide plenty of love and comfort at home.





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Treatments we may use for your pet:

- **Nelio tablets or Semintra Liquid medication** both help to control the condition by reducing the retention of sodium and water in the kidneys. This reduces protein loss in the urine and slows the progression of the kidney damage.
- **Amodip** is a medication used to treat high blood pressure in cats and dogs by allowing the blood vessels to relax and dilate, causing a decrease in blood pressure. This is most often used for cats with hypertension associated with kidney disease.
- **Ipakitine** is a food supplement used to manage dogs and cats with chronic kidney failure by reducing the absorption of phosphates. Ipakitine contains Chitosan and Calcium Carbonate. These act as phosphate binding agents and lower the absorption of phosphates from the intestines.
- **Cystease** is a supplement that has been designed to support the bladder lining of cats.

Are there any other ways I can help my pet?

Specially designed diets are available in a variety of formulations and flavours. Pets with kidney disease often have a poor appetite so start with very tasty foods, or mix special diet with existing foods to stimulate your pets appetite. It is important to be on a specialised food as diet can have a significant effect on your pets kidneys. Please contact us if you are unsure what diet is best.

When to Seek Veterinary Help

If your dog or cat is showing any symptoms of kidney disease, or you notice sudden changes in their behaviour or health, contact your vet promptly. Timely intervention can make a significant difference.



Stage 1



Stage 2



Stage 3



Stage 4



An independently owned practice

