

Kidney Failure and Disease in Dogs

Kidney disease in dogs, also known as renal disease, is a serious condition that affects the kidneys' ability to function properly. The prognosis and treatment options can vary depending on whether the disease is acute or chronic.



Functions of the Kidneys in Dogs:

The kidneys play vital roles, such as:

- **Removing toxins** from the blood and excreting them in urine
- **Regulating blood pressure** and blood acidity
- **Preventing water loss** and maintaining a balanced metabolism

Types of Kidney Disease:

1. Acute Kidney Disease:

- Caused by factors like kidney stones, cancer, or ingestion of toxic substances (e.g., antifreeze, certain foods).
- Symptoms can develop quickly and may be severe.
- Depending on the cause, treatment can be successful, and the dog may recover.

2. Chronic Kidney Disease (CKD):

- A long-term, irreversible condition that progresses over time.
- CKD can often appear to develop suddenly because symptoms may only show when significant damage has occurred.
- There is no cure for CKD, but early detection and treatment can slow its progression.

Causes of Kidney Disease in Dogs:



- **Genetics:** Some breeds are more prone to kidney disease.
- **Age:** Older dogs are more likely to experience kidney issues.
- **Environmental Factors:** Exposure to toxins, infections, or medications.
- **Underlying Illnesses:** Conditions such as cancer or chronic inflammation (e.g., dental disease) can lead to kidney problems.

Symptoms of Kidney Disease:

Symptoms vary depending on the severity and can develop suddenly or gradually:

- Excessive drinking and urination
- House soiling due to increased urine production
- Vomiting and diarrhea
- Loss of appetite and weight loss
- Pale gums (anemia)
- Mouth ulcers
- Weakness or lethargy
- Sudden blindness (due to high blood pressure)
- Fragile bones

If your dog shows any of these signs, it's crucial to consult a vet promptly. Early intervention is key to managing kidney disease effectively.



Diagnosing Kidney Disease:

1. **Blood and Urine Tests:** These can reveal abnormalities linked to kidney function. However, significant damage is often required before changes are detected in standard tests.
2. **Blood Pressure Monitoring:** High blood pressure is common in dogs with CKD.
3. **Imaging (Ultrasound or X-ray):** These help assess the size and structure of the kidneys.
4. **Staging:** Based on test results, kidney disease is classified into stages (I-IV), which helps guide treatment decisions.

Treatment for Kidney Disease in Dogs:

1. **Dietary Management:**
 - A special diet low in protein, phosphorus, calcium, and sodium, but rich in omega-3 fatty acids, can slow disease progression.
 - Hydration is crucial; provide multiple water sources to keep your dog drinking.
2. **Medication:**
 - Various medications can manage symptoms and complications, such as high blood pressure, vomiting, and imbalances in calcium and phosphorus.
 - Supplements, including phosphorus binders and vitamin D, may help.

3. **Fluid Therapy:**

- Fluid therapy helps combat dehydration and aids the kidneys in flushing out toxins. It can be given via intravenous drip or subcutaneously (under the skin).

4. **Kidney Dialysis:**

- Dialysis is rare and not a common treatment for dogs with chronic kidney disease. It's intense, requires multiple sessions, and is available only at select specialist centres.



Preventing Kidney Disease:

- **Responsible Breeding:** Can reduce genetic risk factors for kidney disease.
- **Avoid Toxic Substances:** Keep harmful items like antifreeze, rat poison, grapes, raisins, and certain plants out of reach.
- **Vaccination:** Keep your dog's vaccinations, such as for leptospirosis, up to date.
- **Routine Checkups:** Regular veterinary exams can help catch early signs of kidney disease, especially as your dog ages.

Prognosis:

The outlook for dogs with kidney disease depends on the cause, how advanced the disease is at the time of diagnosis, and how well they respond to treatment. Some dogs live for years with kidney disease, while others may deteriorate rapidly. It's important to focus on maintaining your dog's quality of life, and sometimes, humane euthanasia may be the kindest option if treatments are no longer effective.

Early detection, proactive care, and the right treatment plan can help manage kidney disease and give your dog the best chance at a longer, comfortable life.