





#### (Hypoadrenocorticism)

#### What is Addison's Disease?

Addison's Disease is also called 'hypoadrenocorticism'. This is a potentially life-threatening disorder caused by inadequate production of hormones produced by the adrenal glands, which are in the abdomen near the kidneys. The adrenal glands produce several hormones, of which two are critical for life: glucocorticoids and mineralocorticoids.

- Glucocorticoids, such as cortisol, are essential for life and must be at the right levels in the body for animals (and humans) to feel well. They affect appetite and have effects on the function of the immune system.
- Mineralocorticoids, such as aldosterone, help to control the body's concentrations of sodium and potassium.

#### What causes Addison's Disease?

Addison's Disease results when both of the adrenal glands are damaged. This most commonly occurs when the animal's own immune system, which normally fights off infections, becomes overactive and damages the adrenal glands (so called 'immune mediated' disease). Less common causes of Addison's disease are cancers or infections that can invade and kill the adrenal gland tissues.

## Which animals are predisposed to Addison's Disease?

The condition occurs most frequently in young to middle-aged female dogs. The breeds that appear to be predisposed to Addison's Disease include Portuguese Water Dogs, Standard Poodles and Bearded Collies. However, any dog can be affected by this condition.

### What are the symptoms (signs) of Addison's Disease?

The signs of Addison's Disease come on quickly, usually over a few days. Although, some dogs present with subtle signs gradually develop over a period of months. Most owners notice that their pet develops several problems at about the same time including;

- Reduced appetite
- Lethargy and weakness
- Vomiting
- Diarrhoea
- Weight loss
- Tremors

In severe cases some dogs will suddenly collapse and develop shock-like symptoms.

### What tests are needed to diagnose Addison's Disease?

The signs of vomiting, diarrhoea, loss of appetite, and weight loss are non-specific – many other conditions such as stomach and intestinal diseases, kidney diseases and pancreatic diseases can cause these symptoms. Further tests are therefore needed to determine the cause of these problems.

Changes that may be noted on blood tests include changes in blood salt levels, with an increase in potassium and a decrease in sodium are the 'classic' findings. However, these changes can also be seen within other disease processes. An ACTH stimulation test will need to be performed to further investigate the possibility of this condition.

# What treatment is needed if Addison's Disease is diagnosed?

Initial treatment may include hospitalisation for intravenous fluid therapy, and depending on how unwell the patient is, additional support may be needed. Once stabilised, patients with Addison's Disease require long term (lifelong) treatment with hormone replacement, to substitute for the missing mineralocorticoids and glucocorticoids. Currently the most common form of treatment requires a combination of subcutaneous hormone injection given roughly once every 25 to 31 days, and oral tablets. The amount of medication may need to be changed over time, and follow-up veterinary examinations and blood tests are recommended to monitor the condition and improve the chances of good control of the disease. If patients become unwell or are stressed (for example due to going to boarding kennels, or because of other illness) your vet may guide you to administer some additional steroid therapy.

#### What's the prognosis (outlook)?

Once dogs and cats with Addison's Disease are correctly diagnosed and properly treated, they can live long and happy lives. Treatment is almost always successful and rewarding.





